SINCE 1916

PEACOCK®

PRECISION MEASURING INSTRUMENTS

MODEL 107 IS JAPAN'S FIRST DOMESTICALLY MANUFACTURED DIAL GAUGE.

WIDELY USED IN MANUFACTURING PLANTS

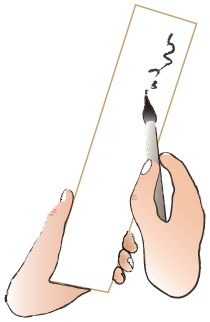
SINCE 1916

PEACOCK®

TOKYO, JAPAN

Mission Statement Harmony and Progress

ORIGIN of PEACOCK.....



The reliable "PEACOCK" brand is highly acclaimed as being representative of Japan's DIAL GAUGES.
The name originates from a haiku poem by Shiki Masaoka that goes,
"Fanning out its tail in the Spring breeze, see-PEACOCK!"
Founder Kiyonobu Ozaki had been interested in haiku since the upper grades of primary school, and he established this trademark for the brand inspired by the neat image Shiki's poem invoked.
Manufacturing fine products that resemble the subtle pattern on the tail of PEACOCK has enable the company to contribute to society.

"PEACOCK"の由来

国産ダイヤルゲージの代名詞とも評される信頼のブランド「PEACOCK」。その由来は、「春風に尾を広げたる孔雀かな」という正岡子規の俳句に由来しています。高等小学校の頃から俳句を趣味にしていた創業者の尾崎清信が、子規の句の清爽なイメージに触発されたことで生まれた商標でした。孔雀の尾の文様のように精緻な製品をつくることで、私たちは社会に貢献していきます。

If you cannot measure it, you cannot improve it.
Measuring is the first step for manufacturing.
We, "PEACOCK" would like to help in every measuring field all over the world.

ISO 9001 : 2015 / JIS Q 9001 : 2015

We, OZAKI MFG. CO., LTD., received ISO 9001 certification in 1999 and now renewed 2015 edition. We have been supplying high quality measuring instruments with reliable brand "PEACOCK" to our customers not only Japan but also overseas countries.

Management System Certificate


ISO 9001
Management System Certificate

Certificate Number : JQA-QM3944

Organization :
OZAKI MFG. CO., LTD.
1-63-11 TOKIWADAI, ITABASHI-KU, TOKYO, JAPAN

JQA certifies that the above organization operates the Quality Management System within the scope of the Appendix attached, which has been assessed and found to comply with the requirements of;

ISO 9001 :2015 / JIS Q 9001 :2015

Registration Date : November 19, 1999
Last Renewal Date : August 1, 2018

Expiry Date : July 31, 2021

N. Kobayashi
NORIAKI KOBAYASHI
PRESIDENT
1-63-11 TOKIWADAI, ITABASHI-KU, TOKYO, JAPAN

JAPAN QUALITY ASSURANCE ORGANIZATION

JQA

Appendix


ISO 9001
Appendix

Certificate Number : JQA-QM3944 1 / 1

Organization :
OZAKI MFG. CO., LTD.

Scope of Registration :
THE DESIGN / DEVELOPMENT, MANUFACTURE AND SERVICING (REPAIRING AND CALIBRATION SERVICE) OF DIAL GAUGES, CYLINDER GAUGES, DIAL TEST INDICATORS AND APPLIED PRODUCTS

ASSOCIATED ORGANIZATION SCOPE OF ACTIVITY: SAME AS ABOVE.

CHIBA FACTORY
484 CHIGUSADAIHIGASHI, FUTTSU-CITY, CHIBA, JAPAN

Registration Date : November 19, 1999
Last Renewal Date : August 1, 2018

Expiry Date : July 31, 2021

N. Kobayashi
NORIAKI KOBAYASHI
PRESIDENT

JAPAN QUALITY ASSURANCE ORGANIZATION

JQA

COPY

ISO Certification for
DIAL GAUGES, PIC TEST INDICATORS, CYLINDER GAUGES AND
ITS APPLIED DIAL GAUGES.

PEACOCK®

Contents

※Design and specifications are subject to change without notice for future improvement.

PEACOCK® Precision Measuring Instruments General Catalog

INDEX

7 Dial Caliper Gauges

8 Applied Dial Gauges

9 Stands

10 Signal Indicators

11 Digital Indicators

12 Parts Drawings

INDEX (Numerical)

(Alphabetical)

Product Weight (packed with case)

*All the Pic Test Indicators are approx. 150g

weight: approx grams.

Model	weight (g)	Model	weight (g)	Model	weight (g)	Model	weight (g)	Model	weight (g)
Dial Gauge		5Z	165	H-1A	280	Dial Caliper Gauge		Linear Gauge	
107	190	5Z-XB	165	H-0.4N	280	LA-1	820	D-5	270
107F	150	47Z	110	H-2.4N	280	LA-2	1,250	D-5B	520
107-BL	190	47Z-XB	110	H-20	295	LA-3	2,100	D-10	360
107F-RE	170	47SZ	100	H-30	315	LA-4	850	D-20	420
107W	220	147Z	100	H-2	780	LA-5	950	D-50	700
107-SWA	205	15Z	165	H-3	780	LA-5S	900	D-50HT	700
107-T	190	15Z-SWF	165	HR-1	550	LA-6	750	D-50WA	720
107F-T	150	15DZ	250	J-A	1,600	LA-8	1,060	D-100	900
107-LL	195	18	200	J-B	1,300	LA-9	770	D-100WA	920
107F-LL	155	196Z	110	PG-10	165	LA-10	1,000	DN-10	360
107-E	190	36Z	165	GL	220	LA-11	780	DN-20	420
107-DX	220	Cylinder Gauge		P-1	200	LA-13	1,800	D-5S	270
107-HG	190	CC-02	500	P-2	330	LA-20	760	D-5SB	520
57	190	CC-01	540	P-3	350	LA-21	1,050	D-10S	360
57F	150	CC-1	600	Q-1	270	LA-22	1,280	D-20S	420
57B	150	CC-2	660	Dial Sheet Gauge		LA-23	1,330	D-50S	700
57-SWA	205	CC-3	700	K-1	3,120	LA-24	8,900	D-50SWA	720
17	190	CC-3C	760	K-2	4,750	LA-31	900	D-100S	900
5B	195	CC-4	1,900	K-3	4,450	LA-7	800	D-100SWA	920
5B-HG	195	CC-5	2,500	K-4	4,500	LA-14	950	DN-10S	360
5F	155	CC-6	5,000	Dial Upright Gauge		LB-1	790	DN-20S	420
5-SWF	210	CG-01	540	R1-A	3,350	LB-2	650	DL-2	260
5-DX	220	CG-1	620	R1-B	3,250	LB-3	800	DL-2S	260
5S	120	CG-2	640	R1-C	3,300	LB-4	820		
25	235	CG-3	680	Dial Depth Gauge		LB-5	1,030	Digital Counter	
25F-RE	255	CG-3C	700	T-1	700	LB-6	810	C-500	1,200
55	225	CG-4	1,900	T-1W	395	LB-8	950	C-700	1,200
55-DX	180	CG-5	2,500	T-2	300	LB-9	1,050	Digital Gauge	
25S	220	CG-6	4,600	T-2W	325	LH-2	500	DGN-125	280
56	180	CC-1S	560	T-2B	245	LB-7	820	DGN-255	280
207	245	CC-2S	600	T-2C	290	LB-7S	770	DGN-257	280
207F-PL	300	CC-3S	660	T-3	300	LB-7V	1,300	PDN-21	400
207S	195	CC-3CS	720	T-4	280	LB-14	920	PDN-51	700
207S-LL	200	CC-01R	540	T-6A	270	Tester		Digital Thicnkess Gauge	
207W	220	CC-1R	600	T-6B	270	NB	6,000		
207WF-T	195	CC-2R	660	Dial Inside Gauge		CCT-2	21,000	G2N-255	420
307	320	CC-3R	700	U-1	330	Bench Center		G2N-255M	420
307S	310	CC-3CR	760	U2HA	250	OA	62,000	G2N-257	420
507	440	CG-01R	540	U2HB	250	Others		G2N-257	420
509	440	CG-1R	620	U2FA	380	YMH-1	340	JAN-255	3,340
809	1,150	CG-2R	640	U2FB	380			JAN-257	3,340
36A	135	CG-3R	680	U3HA	250	XY-1	150		
36B	135	CG-3CR	700	U3HB	250	XY-2	100		
47	110	Dial Thickness Gauge		Stand		XZ-1	155		
47F	100	G	165	SIS-4F	5,000	XZ-2	155	Signal Gauge	
57S	140	G-1A	165	SIS-6C	3,650	GH-1	300	S-5	280
57SF	125	G-1M	165	SIS-7	2,600			S-7	280
196A	115	G-2	370	PDS-2	7,150			S-9	280
196A-6	115	G-3	355	PDS-2F	7,150			SC-2A	260
196B	110	G-4	320	Magnetic Stand					
196B-T	110	G-6	280	YM-1F	1,760				
107Z	160	G-6C	300	YM-2F	2,220				
107Z-XB	160	G-7C	280	YM-3	1,500	Digital Depth Gauge			
17B	190	G-0.4N	165			T2N-255W	440		
17BF	150	G-2.4N	165			T2N-257W	440		
17Z	160	G-20	180						
17Z-SWA	160	G-30	200						
117Z	160	H	280						

Quick Chart for "PEACOCK" Dial Gauge

We have named our dial gauge by model numbers, which indicate measurement range and graduation, instead of product code numbers.

No. 107 — Range 10mm ◄ — ► Grad. 0.01mm

No. 25 — Range 2mm ◄ — ► Grad. 0.001mm

Our model numbers are:

The first and second digit numbers (1, 2, 4, 10, 20, 30, 50, 80) signify measurement ranges.

The last digit numbers
- 7 — 0.01mm graduation
- 5 — 0.001mm graduation
- 6 or 9 — Special graduation
- Z — Less than one revolution dial gauge

Exceptions: 1. Model No. 5 signifies 1mm measurement range with 0.001mm graduation.
2. Model No. 196A, 196B signify 5mm measurement range with 0.01mm graduation.

Dial Gauge

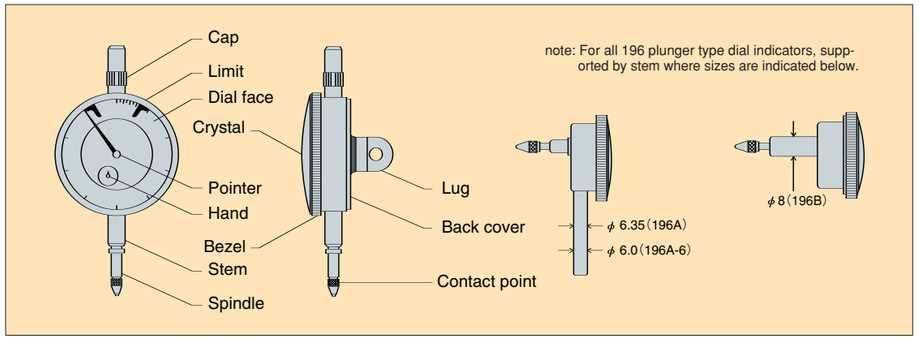
Grad.(mm)	Range(mm)	Model	
0.01	1	**No. 17**	
	3	**No. 36B**	(Small dial face)
	4	**No. 47**	(Small dial face)
	5	**No. 57**	(B: balanced dial. S: small dial face)
	10	**No. 107**	(F-T: continuous CCW dial. SWA: oil-proof)
	20	**No. 207**	(S: small dial face. W: center pointer)
	30	**No. 307**	
	50	**No. 507**	
	5	**No. 196A**	(Back plunger, stem ϕ 6.35mm)
		196A-6	(Back plunger, stem ϕ 6mm)
		196B	(Back plunger, stem ϕ 8mm)
0.05	50	**No. 509**	
0.1	80	**No. 809**	
0.001	1	**No. 5B**	(5SWF: oil-proof. 5S: small dial face)
	2	**No. 25**	(S: small dial face)
	5	**No. 55**	
0.005	3	**No. 36A**	(Small dial face)
	5	**No. 56**	

Less Than One Revolution Dial Gauge

(Larger space between graduation allows easier reading.)

17Z	(With carbide contact point)
17Z-SWA	(Oil-proof, carbide contact point)
17B	(White dial face)
47Z-XB	(Long stem, carbide contact point)
47Z	(Long stem, carbide contact point)
47SZ	(Short stem, carbide contact point)
107Z-XB	(Long stem, carbide contact point)
107Z	(Long stem, flat carbide contact point)
196Z	
5Z-XB	(Long stem, carbide contact point)
5Z	(Long stem, flat carbide contact point)
15Z	(Short stem, carbide contact point)
15Z-SWF	(Oil-proof, carbide contact point)
18	(Long stem, white dial face, carbide contact point)

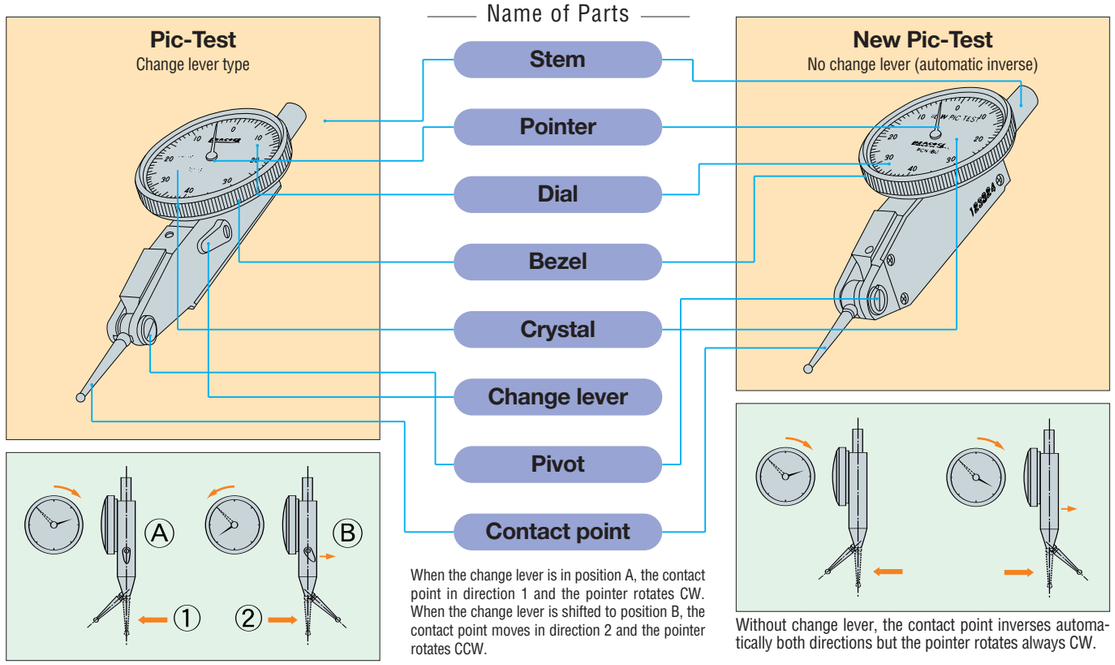
Name of Parts



Quick Chart for "PEACOCK" Lever-Type Dial Indicators

Lever-type dial indicators are most suitable for alignment and TIR (Total Indicator Run-Out) testing. There are two types of lever-type dial indicators. Pivot bearings are used on all of Peacock's lever-type indicators, which assure exceptional precision over a long period of time.

Name of Parts



When the change lever is in position A, the contact point in direction 1 and the pointer rotates CW. When the change lever is shifted to position B, the contact point moves in direction 2 and the pointer rotates CCW.

Without change lever, the contact point inverses automatically both directions but the pointer rotates always CW.

For particular requirements PC and PCN series are available.
Model numbers ending with U, E, D or W signify particular applications.

Example

PCN-1AU (U type)	Anti-magnetic, non-electrifying	Anti-magnetic contact point and pointer allow valid measurement even in strong magnetic fields. Electric flow is blocked by ceramic stem.
PCN-1AE (E type)	Super low measuring force	Measuring force is lower than other lever-type dial indicators. Special indicators with high sensitivity for measurement soft, highly elastic materials.
PCN-1AD (D type)	Large dial face	Large dial face with large numbers allows easy reading of test results.
PC-1BW (W type)	Double dial face	Double sided dial faces allow easy reading from any direction.
PCN-1AR (R type)	With Ruby ball Contact Point	With a Ruby ball, wear resistance has been improved. Also, Ruby ball is non-electrifying and can be used safely with electrical discharge machine.
PCN-1AV (V type)	Without Fixed Stem	Hold by dovetail of the main body. Dovetail Stem ϕ4, 6 and 8mm are available as an option.
PCN-1BZA (Z type)	Within One Revolution	Less than one rotation of the pointer for mis-reading. (A), downward and (B) upward are available for each application.

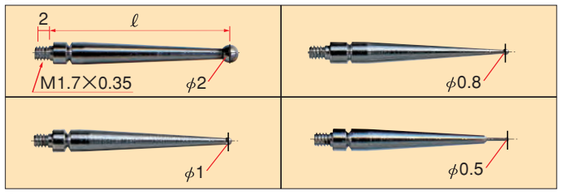
Table for Pic-Test and New Pic-Test

● items are made to order.

	Grad (mm)	Range (mm)	Model	Length of contact point (ℓ size)	Indicator types							
					U	E (measuring force)		D	W	R	V	Z
PC with change lever	0.01	0.5	PC-1A	18.20mm	●	PC-1AE	Less than 0.1N	●	—	PC-1AR	PC-1AV	—
			PC-3 (parallel)	18.20mm	●	—	—	—	—	—	—	—
		0.8	PC-1B	19.24mm	●	PC-1BE	Less than 0.1N	—	PC-1BW	PC-1BR	PC-1BV	—
		1.0	PC-1L	39.72mm	●	PC-1LE	Less than 0.1N	—	—	PC-1LR	PC-1LV	—
	0.002	0.28	PC-2	8.80mm	●	●	—	●	—	PC-2R	PC-2V	—
			PC-4 (parallel)	8.80mm	●	—	—	—	—	—	—	—
PCN without change lever	0.01	0.5	PCN-0	17.74mm	—	—	—	—	—	—	—	—
			PCN-1A	17.74mm	PCN-1AU	PCN-1AE	Less than 0.05N	PCN-1AD	—	PCN-1AR	PCN-1AV	—
			PCN-5 (vertical)	17.74mm	PCN-5U	—	—	—	—	PCN-5R	—	—
		0.8	PCN-1B	18.63mm	PCN-1BU	PCN-1BE	Less than 0.05N	—	—	PCN-1BR	PCN-1BV	PCN-1BZ(A) PCN-1BZ(B)
		1.0	PCN-1L	39.00mm	PCN-1LU	PCN-1LE	Less than 0.05N	PCN-1LD	—	PCN-1LR	PCN-1LV	PCN-1LZ(A) PCN-1LZ(B)
		1.5	PCN-7A	17.74mm	—	—	—	—	—	—	—	—
	0.002	0.2	PCN-2B	13.00mm	PCN-2BU	—	—	—	—	PCN-2BR	PCN-2BV	—
		0.28	PCN-2	14.18mm	PCN-2U	PCN-2E	Less than 0.1N	PCN-2BD	—	PCN-2R	PCN-2V	PCN-2Z(A) PCN-2Z(B)
			PCN-6 (vertical)	14.18mm	PCN-6U	—	—	—	—	PCN-6R	—	—
		0.6	PCN-7C	13.00mm	—	—	—	—	—	—	—	—
	0.001	0.14	PCN-S	8.13mm	PCN-SU	—	—	—	—	PCN-SR	PCN-SV	—
		0.2	—	13.00mm	—	—	—	PCN-SD	—	—	—	—

We can customize Pic-Test and New Pic-Test indicators according to your special needs. Please contact Peacock for details.

Contact Points Ball Size



Warning!

Contact points are not interchangeable among different models. Each indicator is assigned a specific contact point length as shown in the table below. Not using proper contact point for assigned model will result in inaccuracy.

Contact point with ϕ2mm carbide ball is attached to all Pic Test indicators as standard.
ϕ1mm, ϕ0.8mm, ϕ0.5mm, ϕ3mm Carbide ball contact points and ϕ2mm Ruby ball contact points are also available as an option.

Lengths of contact points with ϕ2mm carbide ball (actual size)

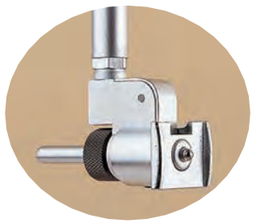
8.13mm	PCN-S PCN-SU		18.20mm		PC-1A PC-1AE PC-3
8.80mm	PC-2 PC-4		18.63mm		PCN-1B PCN-1BU PCN-1BE
13.00mm	PCN-2B PCN-SD PCN-2BU	PCN-7C PCN-2BD	19.24mm		PC-1B PC-1BE PC-1BW
14.18mm	PCN-2 PCN-2U PCN-2E	PCN-6 PCN-6U	39.00mm		PCN-1L PCN-1LU PCN-1LE PCN-1LD
17.74mm	PCN-0 PCN-1A PCN-1AU PCN-1AE	PCN-1AD PCN-5 PCN-5U PCN-7A	39.72mm		PC-1L PC-1LE PC-1LW

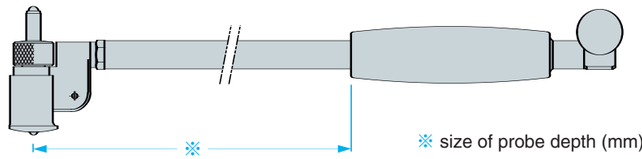
※ϕ2mm Ruby ball are available for PC-1A, PC-1B,PC-1L, PC-2, PCN-1A, PCN-1B, PCN-1L, PCN-2, PCN-2B and PCN-S
For more detailed information, refer to page 58.

Quick Chart for "PEACOCK" Cylinder Gauges

For Both Blind Hole And Deep Bore Measuring

Select the best fitted probe length according to the measuring depth.
- **CC Series (standard)**
- **CG Series (blind hole)**





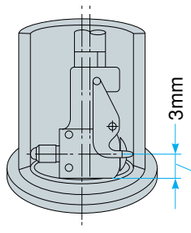
Recommendation Use the cylinder gauge vertically with a probe depth of 400mm or longer.

CC Series

Model	Measurement inner dia	Probe depth (mm) 50	100	150	200	250	300	400	500	600	700	800	900	1000	1500	2000
CC-02	φ 6～φ 10	◉	—	—	—	—	—	—	—	—	—	—	—	—	—	—
CC-01	φ 10～φ 18	●	◉	—	●	—	●	—	—	—	—	—	—	—	—	—
CC-1	φ 18～φ 35	1.◉	●	◉	●	—	●	●	●	—	—	—	—	—	—	—
CC-2	φ 35～φ 60	2.◉	●	◉	●	—	●	●	●	●	●	●	●	●	●	●
CC-3	φ 50～φ 100	3.◉	●	◉	●	—	●	●	●	●	●	●	●	●	●	●
CC-3C	φ 50～φ 150	4.◉	●	◉	●	—	●	●	●	●	●	●	●	●	●	●
CC-4	φ100～φ 160	●	●	—	●	◉	●	●	●	●	●	●	●	●	●	●
CC-5	φ160～φ 250	●	●	—	●	◉	●	●	●	●	●	●	●	●	●	●
CC-6	φ250～φ 400	●	●	—	●	—	●	◉	●	●	●	●	●	●	●	●

● More than L=600mm for CC-2 can not measure from 35 to 44mm and can measure from 45 to 60mm ID.

◉ are standard probe depth sizes
◉ are short type standard items. (Please order by model no.)
1. CC-1S (φ18 ～ φ35)
2. CC-2S (φ35 ～ φ60)
3. CC-3S (φ50 ～ φ100)
4. CC-3CS (φ50 ～ φ150)



Measuring is possible up to 3mm from the bottom of a cylinder.
(CG-6 can measure up to 4.5mm)

CG Series

Model	Measurement inner dia	Probe depth (mm) 50	100	150	200	250	300	400	500	600	700	800	900	1000
CG-01	φ 10～φ 18	●	◉	●	●	●	●	—	—	—	—	—	—	—
CG-1	φ 18～φ 35	●	●	◉	●	●	●	●	●	—	—	—	—	—
CG-2	φ 35～φ 60	●	●	◉	●	●	●	●	●	●	●	●	●	●
CG-3	φ 50～φ 100	●	●	◉	●	●	●	●	●	●	●	●	●	●
CG-3C	φ 50～φ 150	●	●	◉	●	—	●	●	●	●	●	●	●	●
CG-4	φ100～φ 160	●	●	●	●	◉	●	●	●	●	●	●	●	●
CG-5	φ160～φ 250	●	●	●	●	◉	●	●	●	●	●	●	●	●
CG-6	φ250～φ 400	●	●	●	●	●	●	◉	●	●	●	●	●	●

◉ are standard probe depth sizes

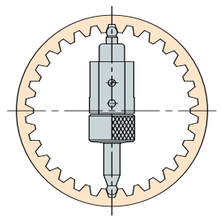
Cylinder Gauges for Measuring Spline and Internal Gears

Easy and precise measurement of an OVER PIN DIAMETER, LARGE and SMALL diameter of SPLINE by our custom-manufactured Cylinder Gauges.

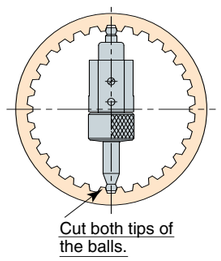
- Measuring OVER PIN diameter...Please specify diameters of over pin and balls.
- Measuring Large/Small diameter of the SPLINE...we will add a guide plate for accurate measurement by the shape of your work-piece.

Measuring OVER PIN Diameter

- **Please specify diameters of Over pin and Balls.**

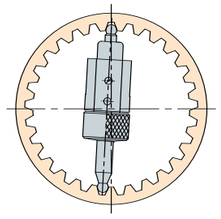


Even tooth



Even tooth

- **We cut both tips of the balls when interference with Large diameter.**

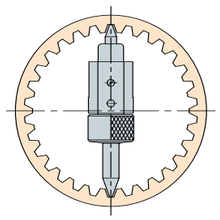


Odd tooth

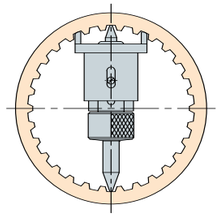
Measuring Large Diameter

- **Please specify large diameter (φD), width and height of face.**

(We design contact points that do not touch either gear surface.)

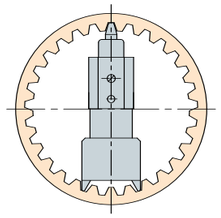


Even tooth



Even tooth

- **In case the root diameter is wide, we will add guide plate.**



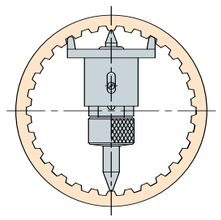
Odd tooth

- **If the root of the face is not in the symmetry, the measurement points will across at any position. This is the reference of measurement by set a Master.**

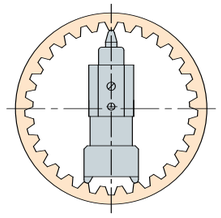
Measuring Small Diameter

- **Please specify small diameter and height of face.**

(We design contact point guides on both sides of contact point.)



Even tooth



Odd tooth

- **If the root of the face is not in the symmetry, the measurement points will across at any position. This is the reference of measurement by set a Master.**

For Inquiries:
We provide quotes based on submitted workpiece drawings or actual workpiece examples. There is no minimum quantity required. Please specify what you want to measure, workpiece materials and tolerance. See page 20.
(Please contact us directly or call a sales representative in your area.)

Request for Special Designed Cylinder Gauge

Measurement for Internal Gear Only
(Helical Gear is not acceptable as unstable.)

Date: _____

Name: _____

For your measurement, please check ☑

☐ Major Diameter

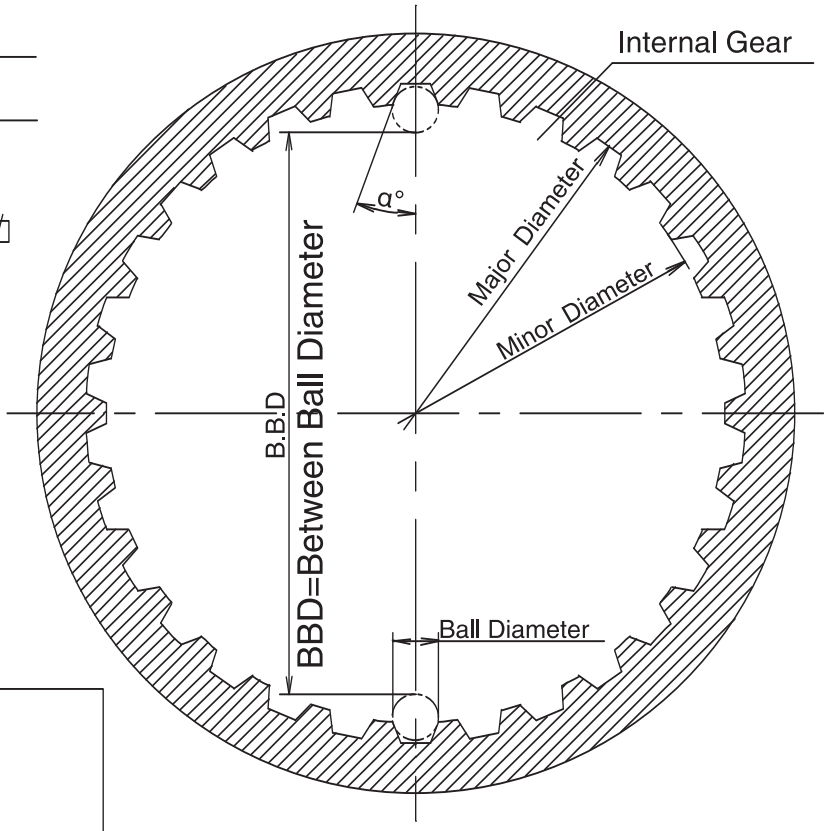
☐ Minor Diameter

☐ B.B.D=Between Ball Diameter or
O.P.D= Over Pin Diameter

Depth of measurement work-piece

_____ mm

Remark:



Specifications for BBD

B.B.D	Tolerance
Ball Diameter	Sφ — Ball Cut ☐ Yes (cut) ☐ No
Major Diameter	Tolerance
Minor Diameter	Tolerance
Pressure Angle	α°=
No.of teeth	Z

Specifications for Major Diameter and Minor Diameter

B.B.D	Tolerance
Ball Diameter	Sφ =
Major Diameter	Tolerance
Minor Diameter	Tolerance
Pressure Angle	α°=
No.of Teeth	Z

※Conversion Table for Odd tooth is unready.

In case ball cut is necessary, we can provide the Master.

Master Production ☐ Yes ☐ No

Please enclose the Specification table with clear Tolerance for your measurement work-piece at the time of request.

OZAKI MFG. CO., LTD. TOKYO, JAPAN
URL: http://www.peacockozaki.jp/eng.htm
Tel: +81 3 3966 1109
Fax: +81 3 3558 1868

PEACOCK

SECTION 1

Dial Gauges

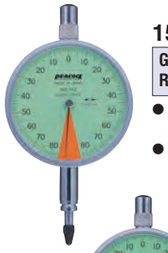
- One Revolution Dial Gauges
- Standard Dial Gauges (0.01mm, 0.005mm, 0.001mm)
- Long Travel Dial Gauges (0.01mm, 0.05mm, 0.1mm)
- Miniature Dial Gauges (0.001mm, 0.005mm, 0.01mm)
- Back Plunger Type Dial Gauges
- Accessories
- Technical Data
- Marking Service

One Revolution Dial Gauges JIS B 7503 : 2017

0.001mm and 0.01mm Z series

- These are high-accuracy dial gauges with the pointer giving less than a full turn that can resist rigorous continuous measurement. The long stem is made of stainless steel, is high in strength and is malfunction-free due to fastening. The dial faces except No. 18 and 17B are easy to read with green and orange (dead zone)
- Jeweled bearing is installed to our general Dial Gauges.

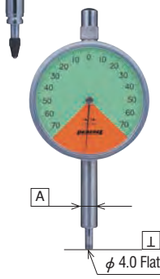
0.001mm Type



15Z
Graduation: 0.001mm
Range: 0.16mm
- Contact point (XB-1)
- Flat back

15Z-SWF
Graduation: 0.001mm
Range: 0.16mm
- Contact point (XB-2A)
- Oil-proof type
- Flat back

5Z-XB
Graduation: 0.001mm
Range: 0.14mm
- Contact point (XB-1)
- Flat back



5Z
Graduation: 0.001mm
Range: 0.14mm
- Long stem
- Flat back

18
Graduation: 0.001mm
Range: 0.16mm
- Long stem
- Contact point (XB-1)
- Oil-proof type
- Flat crystal
- Flat back

New

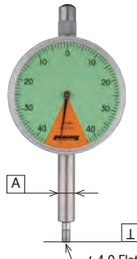
15DZ
Graduation: 0.001mm
Range: 0.16mm
- Large dial face (ϕ 66.5)
- Contact point (XB-1)
- Flat back

0.01mm Type

17Z
Graduation: 0.01mm
Range: 0.8mm
- Contact point (XB-1)
- Flat back

17Z-SWA
Graduation: 0.01mm
Range: 0.8mm
- Oil-proof type
- Contact point (XB-2)
- Flat back

107Z-XB
Graduation: 0.01mm
Range: 0.8mm
- Long stem
- Contact point (XB-1)
- Flat back



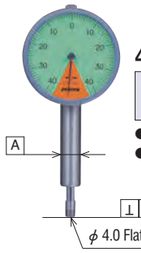
107Z
Graduation: 0.01mm
Range: 0.8mm
- Long stem
- Flat back

17B
Graduation: 0.01mm
Range: 0.8mm
- Contact point (X-1)
- Lug back

New

117Z
Graduation: 0.01mm
Range: 1.0mm
- Contact point (XB-1)
- Flat back

Miniature Type



47Z
Graduation: 0.01mm
Range: 0.8mm
- Long stem
- Flat back

47Z-XB
Graduation: 0.01mm
Range: 0.8mm
- Contact point (XB-1)
- Flat back

47SZ
Graduation: 0.01mm
Range: 0.8mm
- Contact point (XB-1)
- Flat back

New

147Z
Graduation: 0.01mm
Range: 1.0mm
- Small dial face (ϕ 36)
- Contact point (XB-1)
- Flat back

New

36Z
Graduation: 0.005mm
Range: 0.4mm
- Contact point (XB-1)
- Flat back

196Z
Graduation: 0.01mm
Range: 0.8mm
- Stem ϕ 8mm
- Pointer giving less than one revolution
- Contact point (X-112)

Specifications

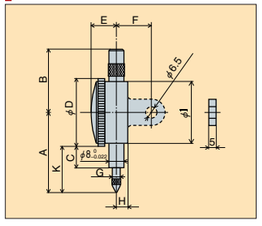
(unit: μm)

Model	Graduation (mm)	Range (mm) (Free stroke)	Reading	Indication error (MPE) 1／10 revolution	1／2 revolution	One revolution	Whole measuring range	Hysteresis error	Repeatability	Measuring force less than (N)
15Z	0.001	0.16 (3.0)	80 - 0 - 80	2	—	—	5	2	0.5	1.5
15Z-SWF	0.001	0.16 (3.0)	80 - 0 - 80	2	—	—	5	2	0.5	1.5
5Z-XB	0.001	0.14 (3.0)	70 - 0 - 70	2	—	—	5	2	0.5	1.5
5Z	0.001	0.14 (3.0)	70 - 0 - 70	2	—	—	5	2	0.5	1.5
18	0.001	0.16 (3.0)	80 - 0 - 80	2	—	—	5	2	0.5	1.5
17Z	0.01	0.8 (7.0)	40 - 0 - 40	5	—	—	8	3	3	1.4
17Z-SWA	0.01	0.8 (7.0)	40 - 0 - 40	5	—	—	8	3	3	1.4
107Z-XB	0.01	0.8 (7.0)	40 - 0 - 40	5	—	—	8	3	3	1.4
107Z	0.01	0.8 (7.0)	40 - 0 - 40	5	—	—	8	3	3	1.4
17B	0.01	0.8 (7.0)	40 - 0 - 40	5	—	—	8	3	3	1.4
New **15DZ**	0.001	0.16 (3.0)	80 - 0 - 80	2	—	—	5	2	0.5	1.5
New **117Z**	0.01	1.0 (7.0)	50 - 0 - 50	5	—	—	8	3	3	1.4
47Z	0.01	0.8 (4.0)	40 - 0 - 40	8	—	—	15	4	3	1.4
47Z-XB	0.01	0.8 (4.0)	40 - 0 - 40	8	—	—	15	4	3	1.4
47SZ	0.01	0.8 (4.0)	40 - 0 - 40	8	—	—	15	4	3	1.4
196Z	0.01	0.8 (4.0)	40 - 0 - 40	8	—	—	15	4	3	1.4
New **147Z**	0.01	1.0 (4.0)	50 - 0 - 50	8	—	—	15	4	3	1.4
New **36Z**	0.005	0.4 (3.0)	20 - 0 - 20	5	—	—	12	3	3	1.4

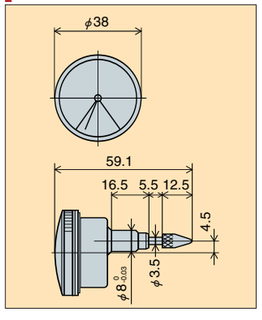
Note- All Dial Indicators (except for 196Z) listed above have flat back as standard.

Note- Lug back Model No. : 47ZL, 47Z-XBL, 47SZL, 147ZL, 36ZL.

Dimensions



Dimensions 196Z



Sizes

Model		A	B	C	D	E	F	G	H	I	K
Flat back type	Lug back type										
15Z	**15ZL**	60	41.5	18.5	53	14.5	(20)	4	6.5	49	33.5
15Z-SWF	**15Z-SWFL**	62.5									36
5Z-XB	**5Z-XBL**	69.4		30							42.9
5Z	**5ZL**	66.4									39.9
18	**18L**	69.4		29	55	16.8					41.9
17Z	**17ZL**	65		18.5	53	14.5					38.5
17Z-SWA	**17Z-SWAL**	65									38.5
107Z-XB	**107Z-XBL**	69.4		30							42.9
107Z	**107ZL**	66.4									39.9
17BF	**17B**	65	40.5	18.5			20(—)				38.5
New **117Z**	**117ZL**	65	41.5	18.5			(20)				38.5
New **15DZ**	**15DZL**	69.4	41.5	23.7	66.5	15.5			7.6		36
47Z	**47ZL**	58.9	20	30	36	13	(15)	4	5.8	32	40.9
47Z-XB	**47Z-XBL**	61.9									43.9
47SZ	**47SZL**	41.1		9.7				3.5	6.5		23.1
New **147Z**	**147ZL**	41.1									23.1
New **36Z**	**36ZL**	60	41.5	18.5	53	14.5	(20)	4		49	33.5

Note- ( ) indicates the model number of lug back and its size. Both lug back and flat back share the same size except for the items listed under column F.

Standard Dial Gauges JIS B 7503 : 2017

0.001mm and 0.005mm

Dial Gauges are widely used manufacturing plants.

- The shock-proof mechanism prevents gears from damage due to shocks arisen by abruptly pushing up the spindle.
- The turning section of the outer frame sealed by the O-ring and the back inside sealed by the packing are water-proof and dust-proof in construction.
- The back is increased in strength by four screws, and the lug can be turned 90 degrees in the installation way.
- Jeweled bearing is installed to our general Dial Gauges.

<HG>

High Precision Type

5B-HG

Graduation: 0.001mm
Range: 1mm

- Indication error ±3μm
- Retrace error 2μm
- Includes accuracy certification
- Lug back

5B

Graduation: 0.001mm
Range: 1mm

- Lug back

5F

Graduation: 0.001mm
Range: 1mm

- Flat back

5-DX

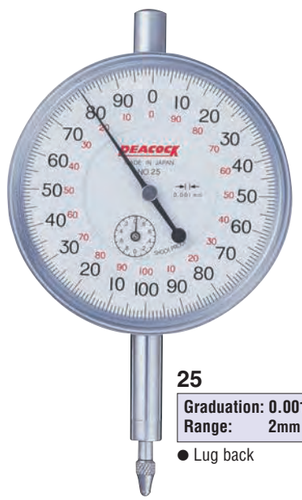
Graduation: 0.001mm
Range: 1mm

- Durable type (Spindle φ5mm)
- Lug back

5-SWF

Graduation: 0.001mm
Range: 1mm

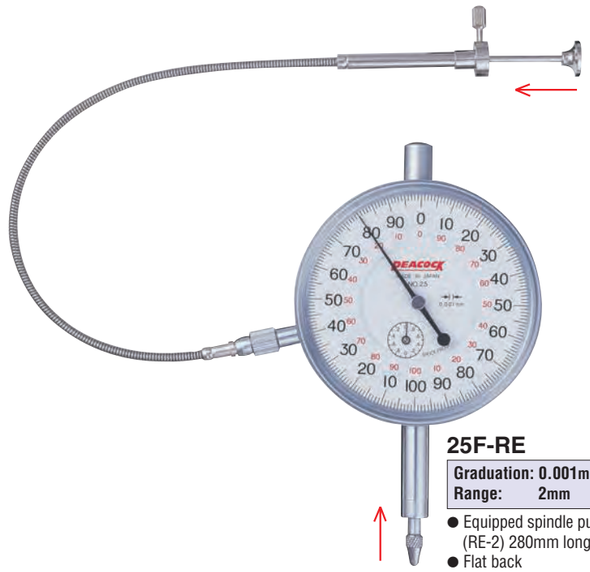
- Oil-proof type
- Contact point (X-2A)
- Lug back



25

Graduation: 0.001mm
Range: 2mm

- Lug back



25F-RE

Graduation: 0.001mm
Range: 2mm

- Equipped spindle pull-up release (RE-2) 280mm long
- Flat back

25S

Graduation: 0.001mm
Range: 2mm

- Small dial face type (φ55.7mm)
- Lug back

55

Graduation: 0.001mm
Range: 5mm

- Lug back

55-DX

Graduation: 0.001mm
Range: 5mm

- Small dial face type (φ57mm)
- Lug back

56

Graduation: 0.005mm
Range: 5mm

- Lug back

Specifications

(unit: μm)

Model	Graduation (mm)	Range (mm)	Reading	Indication error (MPE)				Hysteresis error	Repeatability	Measuring force less than (N)
				1/10 revolution	1/2 revolution	One revolution	Whole measuring range			
5B-HG	0.001	1	0 - 100 - 0	1.6	2.8	3.2	4	1.6	0.5	1.5
5-DX	0.001	1	0 - 100 - 0	2.5	3	4	5	3	0.5	1.5
5B	0.001	1	0 - 100 - 0	2	3.5	4	5	2	0.5	1.5
5F	0.001	1	0 - 100 - 0	2	3.5	4	5	2	0.5	1.5
5-SWF	0.001	1	0 - 100 - 0	2	3.5	4	5	2	0.5	1.5
25	0.001	2	±0 - 100 - 100	2	4	5	7	2	0.5	1.5
25F-RE	0.001	2	±0 - 100 - 100	2	4	5	7	2	0.5	1.5
25S	0.001	2	0 - 100 - 0	2	4	5	7	2	0.5	1.5
55	0.001	5	0 - 100 - 0	3.5	5	6	10	3	1	1.5
55-DX	0.001	5	0 - 100 - 0	3.5	5	6	10	3	1	1.5
56	0.005	5	0 - 25 - 50	5	9	10	12	3	3	1.5

Standard Dial Gauges JIS B 7503 : 2017

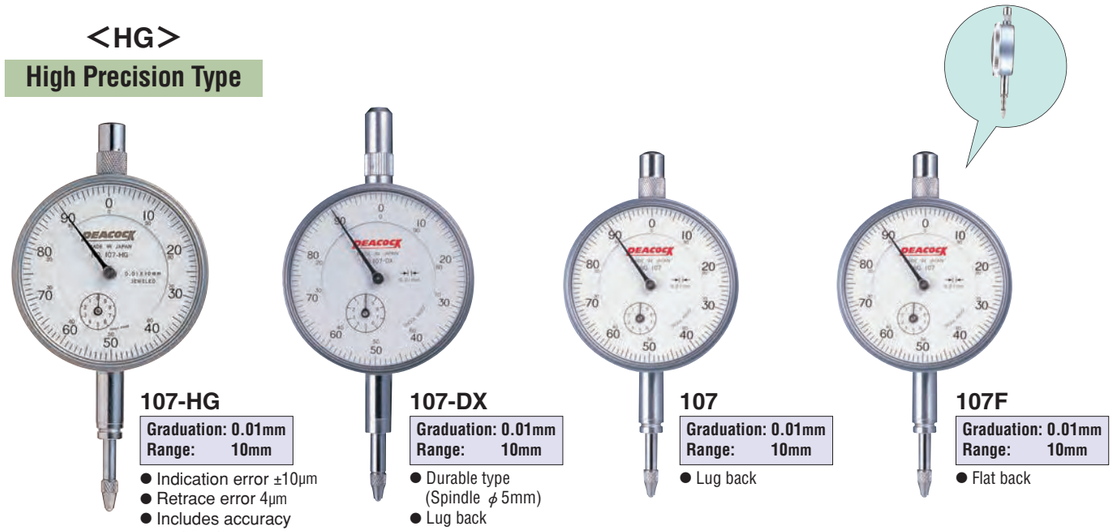
0.01mm

Dial Gauges are widely used manufacturing plants.

- The stem, made of SK quench hardened with strength, is malfunction-free due to fastening.
- The shock-proof mechanism prevents gears from damage due to shocks arisen by abruptly pushing up the spindle.
- The turning section of the outer frame sealed by the O-ring and the back inside sealed by the packing are waterproof and dust-proof in construction.
- The back is increased in strength by four screws, and the lug can be turned 90 degrees in the installation way.
- Jeweled bearing is installed to our general Dial Gauges.

<HG>

High Precision Type

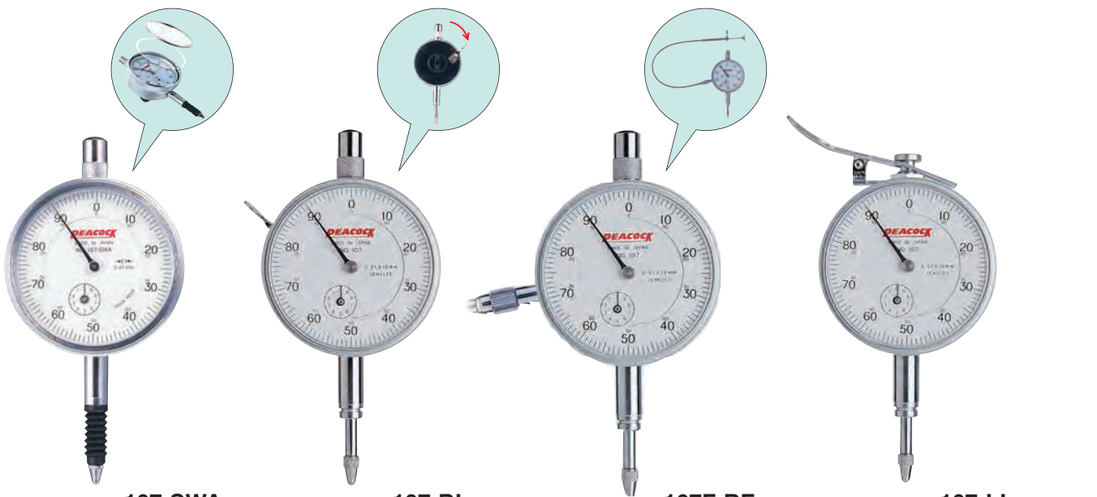


107-HG
Graduation: 0.01mm
Range: 10mm
- Indication error ±10μm
- Retrace error 4μm
- Includes accuracy certification
- Lug back

107-DX
Graduation: 0.01mm
Range: 10mm
- Durable type (Spindle ϕ5mm)
- Lug back

107
Graduation: 0.01mm
Range: 10mm
- Lug back

107F
Graduation: 0.01mm
Range: 10mm
- Flat back

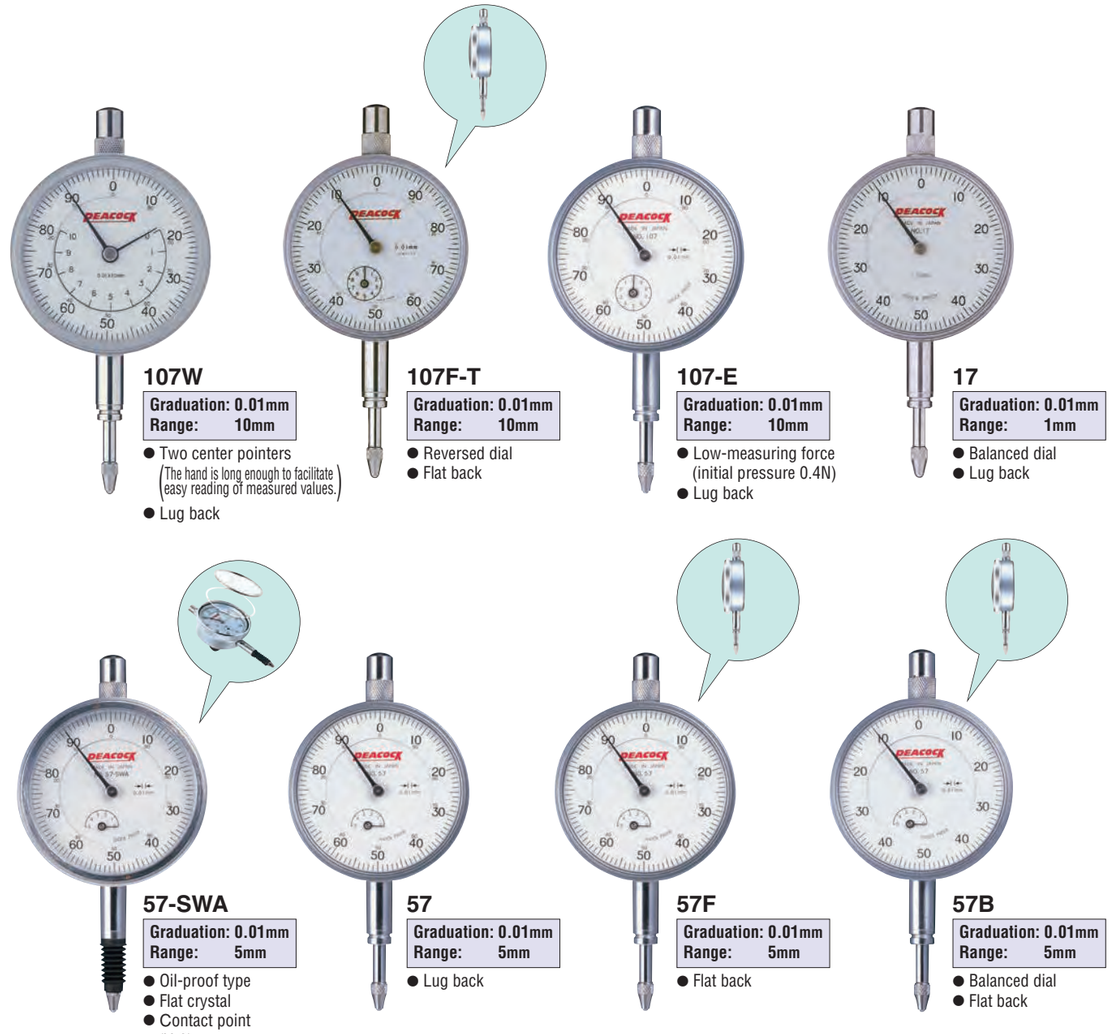


107-SWA
Graduation: 0.01mm
Range: 10mm
- Oil-proof type
- Flat crystal
- Contact point (X-2A)
- Lug back

107-BL
Graduation: 0.01mm
Range: 10mm
- Spindle pull-up back lever
- Lug back

107F-RE
Graduation: 0.01mm
Range: 10mm
- Spindle pull-up release (RE-1) 280 mm long
- Flat back

107-LL
Graduation: 0.01mm
Range: 10mm
- Spindle lifting lever (LL-1)
- Lug back



107W
Graduation: 0.01mm
Range: 10mm
- Two center pointers (The hand is long enough to facilitate easy reading of measured values.)
- Lug back

107F-T
Graduation: 0.01mm
Range: 10mm
- Reversed dial
- Flat back

107-E
Graduation: 0.01mm
Range: 10mm
- Low-measuring force (initial pressure 0.4N)
- Lug back

17
Graduation: 0.01mm
Range: 1mm
- Balanced dial
- Lug back

57-SWA
Graduation: 0.01mm
Range: 5mm
- Oil-proof type
- Flat crystal
- Contact point (X-2)
- Lug back

57
Graduation: 0.01mm
Range: 5mm
- Lug back

57F
Graduation: 0.01mm
Range: 5mm
- Flat back

57B
Graduation: 0.01mm
Range: 5mm
- Balanced dial
- Flat back

Specifications

(unit: μm)

Model	Graduation (mm)	Range (mm)	Reading	Indication error (MPE)				Hysteresis error	Repeatability	Measuring force less than (N)
				1/10 revolution	1/2 revolution	One revolution	Whole measuring range			
107-HG	0.01	10	±0 - 50 - 100	4	7	8	12	2.5	3	1.4
107-DX	0.01	10	±0 - 50 - 100	5	9	10	15	3	3	1.4
107	0.01	10	±0 - 50 - 100	5	9	10	15	3	3	1.4
107F	0.01	10	±0 - 50 - 100	5	9	10	15	3	3	1.4
107-SWA	0.01	10	±0 - 50 - 100	5	9	10	15	3	3	1.4
107-BL	0.01	10	±0 - 50 - 100	5	9	10	15	3	3	1.4
107F-RE	0.01	10	±0 - 50 - 100	5	9	10	15	3	3	1.4
107-LL	0.01	10	±0 - 50 - 100	5	9	10	15	3	3	1.4
107W	0.01	10	±0 - 50 - 100	5	9	10	15	3	3	1.4
107F-T	0.01	10	±100 - 50 - 0	5	9	10	15	3	3	1.4
107-E	0.01	10	±0 - 50 - 100	5	9	10	15	3	3	initial pressure 0.4
17	0.01	1	0 - 50 - 0	5	8	8	8	3	4	1.4
57-SWA	0.01	5	±0 - 50 - 100	5	9	10	12	3	3	1.4
57	0.01	5	±0 - 50 - 100	5	9	10	12	3	3	1.4
57F	0.01	5	±0 - 50 - 100	5	9	10	12	3	3	1.4
57B	0.01	5	0 - 50 - 0	5	9	10	12	3	3	1.4

Long Travel Dial Gauges JIS B 7503 : 2017

0.01mm, 0.05mm and 0.1mm

Dial Gauges are widely used manufacturing plants.

- The stem, made of SK quench hardened with strength, is malfunction-free due to fastening.
- The shock-proof mechanism prevents gears from damage due to shocks arisen by abruptly pushing up the spindle.
- The turning section of the outer frame sealed by the O-ring and the back inside sealed by the packing are water-proof and dust-proof in construction.
- The back is increased in strength by four screws, and the lug can be turned 90 degrees in the installation way.
- Jeweled bearing is installed to our general Dial Gauges.

The position of the lever can be installed either right or left.

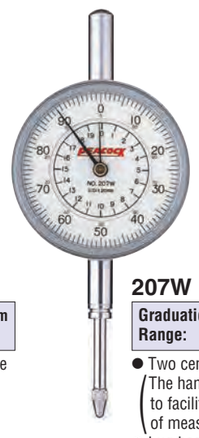
207
Graduation: 0.01mm
Range: 20mm
- Lug back

207F-PL
Graduation: 0.01mm
Range: 20mm
- Pump type spindle lifting lever
- Flat back

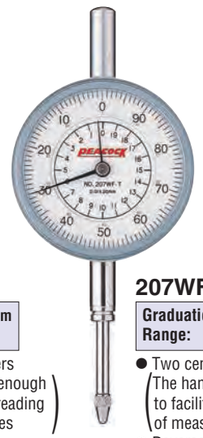
207F-T
Graduation: 0.01mm
Range: 20mm
- Reversed dial
- Flat back

207S-LL
Graduation: 0.01mm
Range: 20mm
- Spindle lifting lever (LL-1)
- Small dial face type (ϕ 53mm)
- Lug back

207S
Graduation: 0.01mm
Range: 20mm
- Small dial face type (ϕ 53mm)
- Lug back

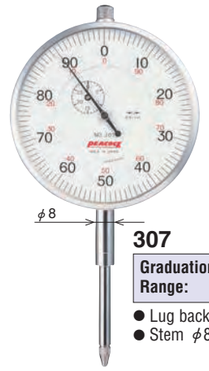


207W
Graduation: 0.01mm
Range: 20mm
- Two center pointers (The hand is long enough to facilitate easy reading of measured values)
- Lug back



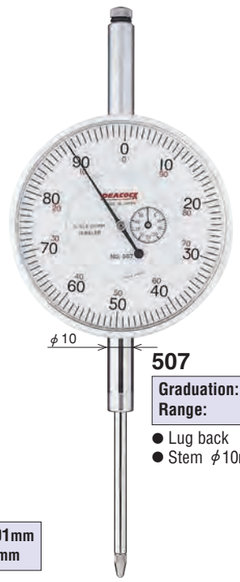
207WF-T
Graduation: 0.01mm
Range: 20mm
- Two center pointers (The hand is long enough to facilitate easy reading of measured values)
- Reversed dial
- Flat back

307S
Graduation: 0.01mm
Range: 30mm
- Small dial face type (ϕ 57mm)
- Contact point (X-2)
- Lug back



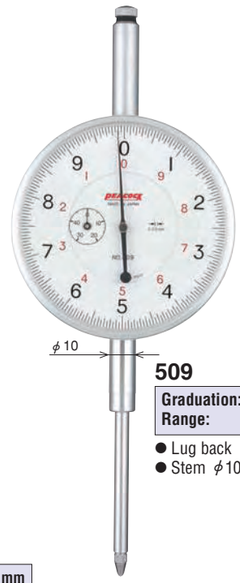
ϕ 8

307
Graduation: 0.01mm
Range: 30mm
- Lug back
- Stem ϕ 8mm



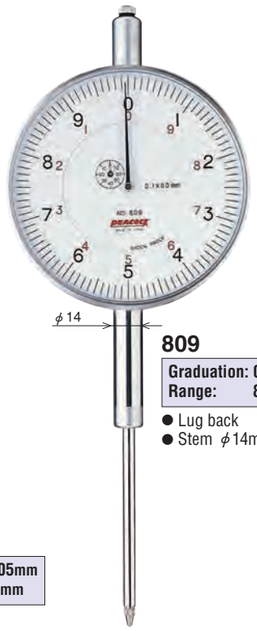
ϕ 10

507
Graduation: 0.01mm
Range: 50mm
- Lug back
- Stem ϕ 10mm



ϕ 10

509
Graduation: 0.05mm
Range: 50mm
- Lug back
- Stem ϕ 10mm



ϕ 14

809
Graduation: 0.1mm
Range: 80mm
- Lug back
- Stem ϕ 14mm

Specifications

(unit: μm)

Model	Graduation (mm)	Range (mm)	Reading	Indication error (MPE)				Hysteresis error	Repeatability	Measuring force less than (N)
				1／10 revolution	1／2 revolution	One revolution	Whole measuring range			
207	0.01	20	±0 - 50 - 100	8	10	15	25	5	4	2.0
207F-PL	0.01	20	±0 - 50 - 100	8	10	15	25	5	4	2.0
207F-T	0.01	20	±100 - 50 - 0	8	10	15	25	5	4	2.0
207S-LL	0.01	20	±0 - 50 - 100	8	10	15	25	5	4	2.0
207S	0.01	20	±0 - 50 - 100	8	10	15	25	5	4	2.0
207W	0.01	20	±0 - 50 - 100	8	10	15	25	5	4	2.0
207WF-T	0.01	20	±100 - 50 - 0	8	10	15	25	5	4	2.0
307S	0.01	30	±0 - 50 - 100	10	12	15	30	7	5	2.2
307	0.01	30	±0 - 50 - 100	10	12	15	30	7	5	2.2
507	0.01	50	±0 - 50 - 100	10	12	15	40	8	5	2.5
509	0.05	50	±0 - 5 - 10	30	60	100	100	10	20	2.5
809	0.1	80	±0 - 5 - 10	50	—	—	100	—	35	2.5

Miniature Dial Gauges JIS B 7503 : 2017

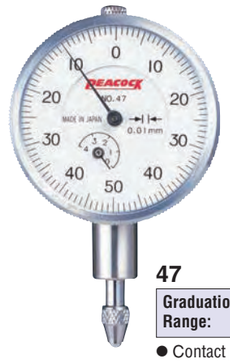
0.001mm, 0.005mm and 0.01mm

- These compact size dial gauges are equipped with small dial faces. They are especially useful for measuring jigs, in restricted areas.
- Jeweled bearing is installed to our general Dial Gauges.

5S

Graduation: 0.001mm
Range: 1mm

- Contact point (X-107)
- Flat back
- Dial dia. ϕ40.8mm



47

Graduation: 0.01mm
Range: 4mm

- Contact point (X-107)
- Lug back
- Dial dia. ϕ36mm

47F

Graduation: 0.01mm
Range: 4mm

- Contact point (X-107)
- Flat back
- Dial dia. ϕ36mm

57S

Graduation: 0.01mm
Range: 5mm

- Contact point (X-105)
- Lug back
- Dial dia. ϕ39mm

36A

Graduation: 0.005mm
Range: 3mm

- Contact point (X-107)
- Lug back
- Dial dia. ϕ40.8mm

36B

Graduation: 0.01mm
Range: 3mm

- Contact point (X-107)
- Lug back
- Dial dia. ϕ40.8mm

Specifications

(unit: μm)

Model	Graduation (mm)	Range (mm)	Reading	Indication error (MPE)				Hysteresis error	Repeatability	Measuring force less than (N)
				1/10 revolution	1/2 revolution	One revolution	Whole measuring range			
5S	0.001	1	±0 - 100 - 100	5	6	7	10	4	2	1.5
47	0.01	4	0 - 50 - 0	8	12	14	18	4	3	1.4
47F	0.01	4	0 - 50 - 0	8	12	14	18	4	3	1.4
57S	0.01	5	±0 - 50 - 100	8	12	14	18	4	3	1.4
36A	0.005	3	±0 - 25 - 50	6	9	10	12	3.5	3	1.4
36B	0.01	3	±0 - 25 - 50	8	11	12	16	4	3	1.4

Back Plunger Type Dial Gauges JIS B 7503 : 2017

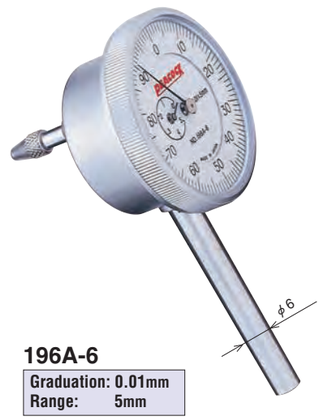
0.01mm

- The back plunger dial gauge is characterized with easy handling since the spindle having the contact point moves in the direction perpendicular to the dial face and the gauge is more compact.
- The dial gauge of this type is convenient for use in achieving a parallelism of the table of the machine tool, with measuring jigs, in restricted areas and on locations where scale reading is difficult.
- Jeweled bearing is installed to our general Dial Gauges.

196A

Graduation: 0.01mm
Range: 5mm

- Stem ϕ 6.35mm
- Contact point (X-1)



196A-6

Graduation: 0.01mm
Range: 5mm

- Stem ϕ 6mm
- Contact point (X-1)

196Z

Graduation: 0.01mm
Range: 0.8mm

- Stem ϕ 8mm
- Pointer giving less than one revolution
- Contact point (X-112)

196B

Graduation: 0.01mm
Range: 5mm

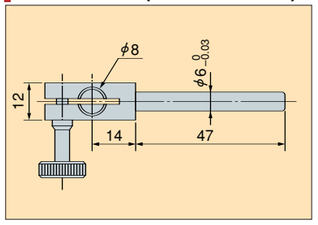
- Stem ϕ 8mm
- Contact point (X-112)

196B-T

Graduation: 0.01mm
Range: 5mm

- Stem ϕ 8mm
- Reversed dial
- Contact point (X-112)

Dimensions (Holder for 196B)



Specifications

(unit: μm)

Model	Graduation (mm)	Range (mm)	Reading	Indication error (MPE)				Hysteresis error	Repeatability	Measuring force less than (N)
				1/10 revolution	1/2 revolution	One revolution	Whole measuring range			
196A	0.01	5	0 - 50 - 100	8	12	14	18	4	3	1.4
196A-6	0.01	5	0 - 50 - 100	8	12	14	18	4	3	1.4
196Z	0.01	0.8	40 - 0 - 40	8	—	—	15	4	3	1.4
196B	0.01	5	0 - 50 - 100	8	12	14	18	4	3	1.4
196B-T	0.01	5	100 - 50 - 0	8	12	14	18	4	3	1.4

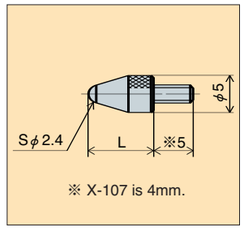
※ Dial dia. ϕ38mm (All Back Plunger type Dial Gauges)

Replaceable Contact Point (Screw pitch M2.5 × 0.45mm)

for Dial Indicators and Linear Gauges

● Ball Contact Point

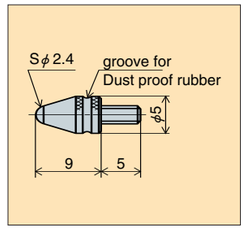
X-1



Part No.	L(mm)	Material
X-1	9	Steel
X-103	3.5	Steel
X-105	5	Steel
X-107	7.5	Steel
X-112	12.5	Steel
X-125	25	Steel
XB-1	9	Carbide
XB-115	15	Carbide
XB-125	25	Carbide
XB-130	30	Carbide
XC-1	9	Ruby
XC-125	25	Ruby

● Ball Contact Point for Oil Proof type

X-2



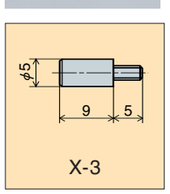
Part No.	L(mm)	Material
X-2	9	Steel
XB-2	9	Carbide
XC-2	9	Ruby
X-2A	12	Steel
XB-2A	12	Carbide

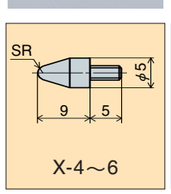
● Special Contact Point

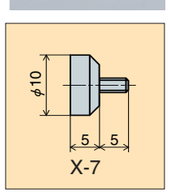
X-3

X-4～6

X-7



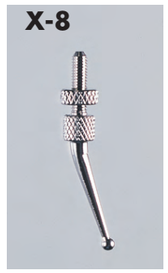


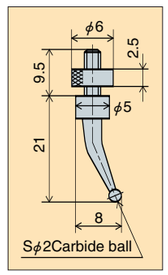


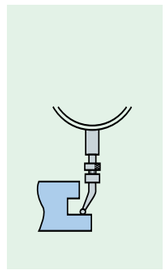
Part No.	Material
X-3	NSB
X-4	Copper
X-5	Bakelite
X-6	Teflon
X-7	Teflon

● Offset Contact Point

X-8





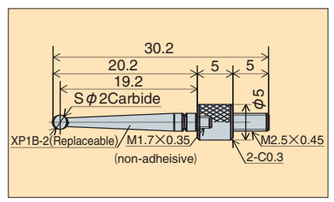


Part No.	Material
X-8	Carbide

● Special Contact Point

X-12

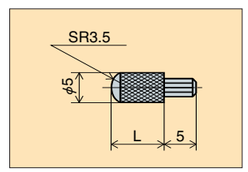
●Replaceabele for Contact Point for Pic Test Indicator

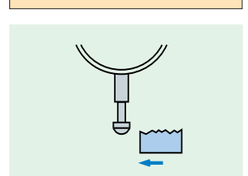


Part No.	Material
X-12	Carbide

● Spherical Contact Point

XS-1





XS-1 series

Part No.	L(mm)	Material
XS-1	8	SKS3
XS-105	5	SKS3
XS-110	10	SKS3
XS-115	15	SKS3
XS-120	20	SKS3
XS-125	25	SKS3
XS-130	30	SKS3

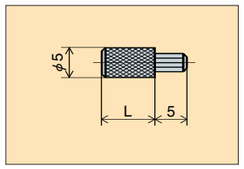
SINCE 1916 PEACOCK
1
Replaceable Contact Point

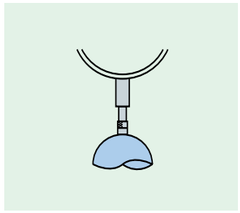
Replaceable Contact Point (Screw pitch M2.5 × 0.45mm)

for Dial Indicators and Linear Gauges

● Flat Contact Point

XS-2



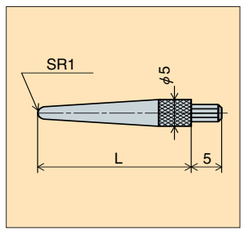


XS-2 series

Part No.	L(mm)	Material
XS-2	8	SKS3
XS-205	5	SKS3
XS-210	10	SKS3
XS-215	15	SKS3
XS-220	20	SKS3
XS-225	25	SKS3
XS-230	30	SKS3

● Taper Contact Point

XS-3

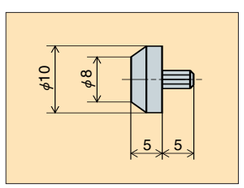


XS-3 series

Part No.	L(mm)	Material
XS-3	25	SKS3
XS-310	10	SKS3
XS-315	15	SKS3
XS-320	20	SKS3
XS-330	30	SKS3

● Plain Contact Point

XS-4

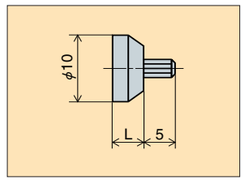


XS-4 series

Part No.	Material
XS-4	SKS3

● Flat Contact Point

XS-5

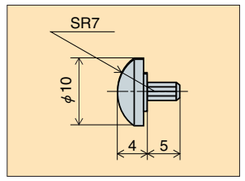


XS-5 series

Part No.	L(mm)	Material
XS-5	5	SKS3
XS-510	10	SKS3

● Button type Contact Point

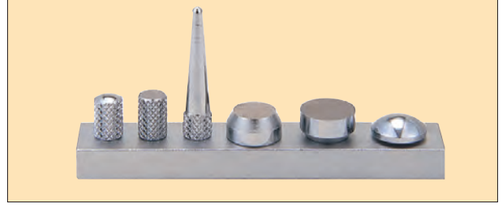
XS-6



XS-6 series

Part No.	Material
XS-6	SKS 3

● Contact Point set XS

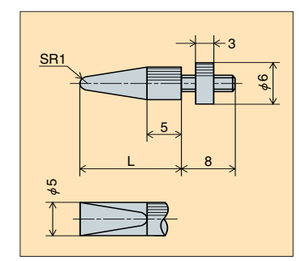


※XS is provided with setting table for XS-1 to XS-6 contact points, and a case. Each type sold separately.

Part No.	Material
XS	SKS3

● Knife-edge Contact Point

XS-710



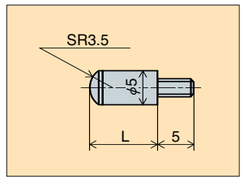
Part No.	L(mm)	Material
XS-710	10	SKS3
XS-715	15	SKS3
XS-720	20	SKS3
XS-725	25	SKS3
XS-730	30	SKS3

Replaceable Contact Point (Screw pitch M2.5 × 0.45mm)

for Dial Indicators and Linear Gauges

● Carbide Spherical Contact Point

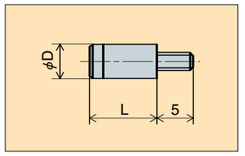
XB-308



Part No.	L (mm)	Material
XB-305	5	Carbide
XB-308	8	Carbide

● Carbide Flat Contact Point

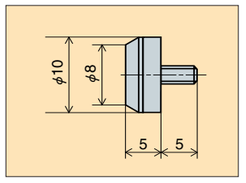
XB-408



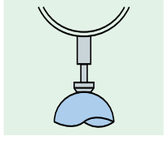
Part No.	ϕD (mm)	L (mm)	Material
XB-405	5	5	Carbide
XB-406	4	6	Carbide
XB-408	5	8	Carbide

● Carbide Plain Contact Point

XB-505

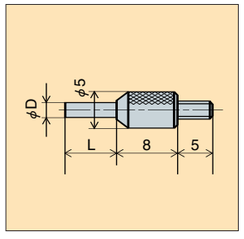


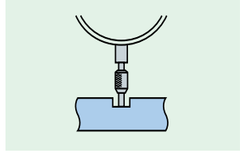
Part No.	Material
XB-505	Carbide



● Needle Type Contact Point

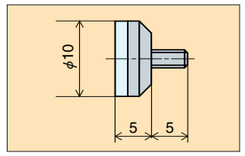
XB-801





● Carbide Flat Contact Point

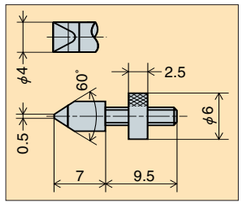
XB-605

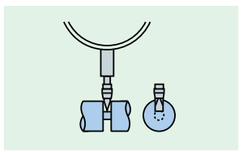


Part No.	Material
XB-605	Carbide

● Carbide Knife-edge Contact Point

XB-707

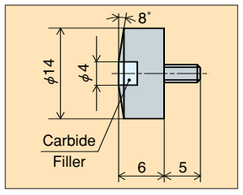




Part No.	Material
XB-707	Carbide

● Carbide Plain Contact Point

XB-506



Part No.	Material
XB-506	Carbide

Part No.	ϕD (mm)	L (mm)	Material
XB-800	1	2	Carbide
XB-801	1.5	12	Carbide
XB-802	2	7	Carbide
XB-803	2	12	Carbide
XB-804	1	20	Carbide
XB-805	1.5	20	Carbide
XB-806	2	20	Carbide
XB-807	1	40	Carbide
XB-808	1.5	40	Carbide
XB-809	2	40	Carbide

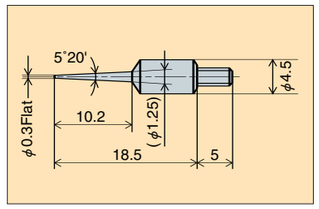
Part No.	ϕD (mm)	L (mm)	Material
XS-800	1	2	SKS3
XS-801	1.5	12	SKS3
XS-802	2	7	SKS3
XS-803	2	12	SKS3
XS-804	1	20	SKH
XS-805	1.5	20	SKH
XS-806	2	20	SKH
XS-807	1	40	SKH
XS-808	1.5	40	SKH
XS-809	2	40	SKH

Replaceable Contact Point (Screw pitch M2.5 × 0.45mm)

for Dial Indicators and Linear Gauges

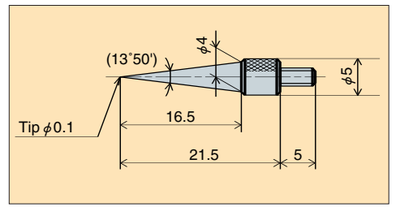
● Needle Contact Point

XT-2C



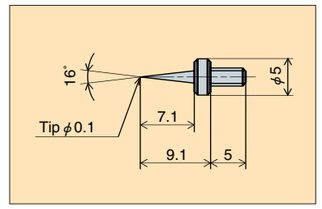
Part No.	Material
XT-2C	SK 3

XT-3



Part No.	Material
XT-3	SK 3

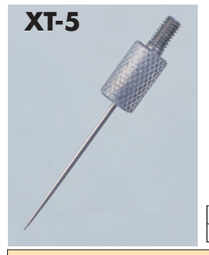
XT-4



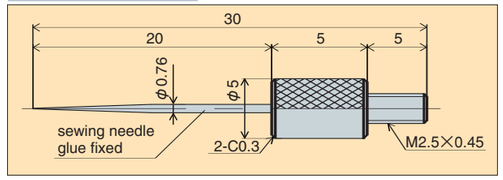
Part No.	Material
XT-4	SK 3

● Needle Contact Point

XT-5



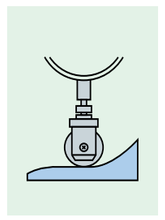
Part No.	Material
XT-5	sewing needle

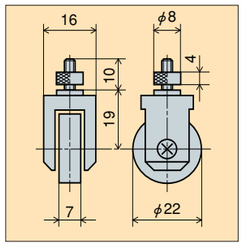


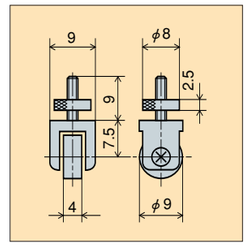
● Roller Contact Point

SH-1

SH-2







Part No.	Material
SH-1	SUJ2

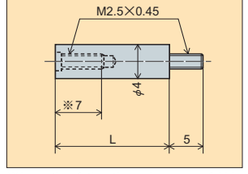
Part No.	Material
SH-2	SUJ2

● Contact Point Joint

To extend the contact point, simply add the contact point joint.

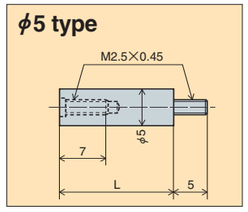
L (mm)	ϕ4 type	ϕ5 type
6	XJ-406	
10	XJ-410	XJ-510
15	XJ-415	
20	XJ-420	XJ-520
25	XJ-425	
30	XJ-430	XJ-530
35	XJ-435	
40	XJ-440	XJ-540
45	XJ-445	
50	XJ-450	XJ-550
55	XJ-455	
60	XJ-460	XJ-560
65	XJ-465	
70	XJ-470	
75	XJ-475	
80	XJ-480	
90	XJ-490	
100	XJ-400	

ϕ4 type



※Length of the thread screw of XJ-406 is 5mm.

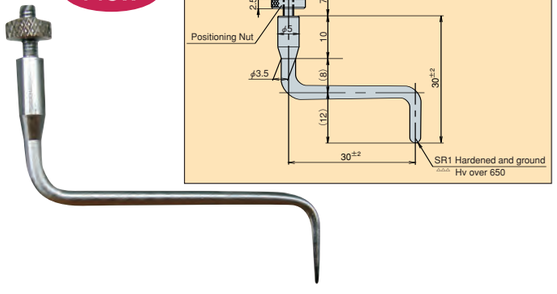
ϕ5 type



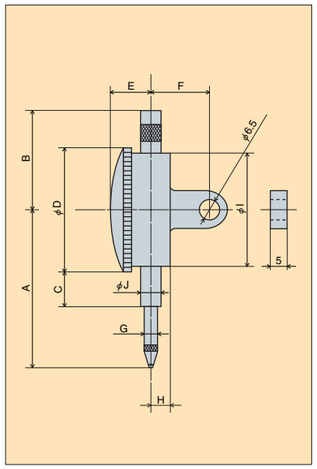
Offset Contact Point No. X-13

● Unique Contact Point not existing before! It is possible to make a measurement of an object that used to be impossible to measure.

New



Dimensions of Dial Gauges



Standard 0.001mm 0.005mm (mm)

Model	A	B	C	D	E	F	G	H	I	J
5B-HG	60	41.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.022}$
5-DX	60	42.6	17	55.7	14.5	20	5	7	52	$8.0^{0}_{-0.03}$
5B	60	41.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.022}$
5F	60	41.5	18.5	53	14.5	—	4	6.5	49	$8.0^{0}_{-0.022}$
5-SWF	63	41.5	17.5	55	15	20	4	6.5	49	$8.0^{0}_{-0.022}$
25	72	42	25	66.5	14.5	20	4	7.5	62.5	$8.0^{0}_{-0.03}$
25F-RE	72	41	25	66.5	14.5	—	4	7.5	62.5	$8.0^{0}_{-0.03}$
25S	60	42.6	17	55.7	14.5	20	5	7	52	$8.0^{0}_{-0.03}$
55	73	52	25	66	17	20	4.5	7	62.5	$8.0^{0}_{-0.03}$
55-DX	62	44.5	17	57	17	19.5	4.5	6.5	52	$8.0^{0}_{-0.03}$
56	62	44.5	17	57	17	19.5	4.5	6.5	52	$8.0^{0}_{-0.03}$

Standard 0.01mm (mm)

Model	A	B	C	D	E	F	G	H	I	J
107-HG	65	41.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.03}$
107-DX	65	50.7	17	55.7	14.5	20	5	7	52	$8.0^{0}_{-0.03}$
107	65	41.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.03}$
107F	65	41.5	18.5	53	14.5	—	4	6.5	49	$8.0^{0}_{-0.03}$
107-SWA	68	41.5	17.5	55	15	20	4	6.5	49	$8.0^{0}_{-0.03}$
107-BL	65	41.5	18.5	53	14.5		4	6.5	49	$8.0^{0}_{-0.03}$
107F-RE	65	41.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.03}$
107-LL	65	—	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.03}$
107W	65	41.5	17.5	55	17	20	4	6.5	49	$8.0^{0}_{-0.03}$
107F-T	65	41.5	18.5	53	14.5	—	4	6.5	49	$8.0^{0}_{-0.03}$
107-E	65	41.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.03}$
17	65	41.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.03}$
57-SWA	65	41.5	18.5	55	15	20	4	6.5	49	$8.0^{0}_{-0.03}$
57	65	41.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.03}$
57F	65	41.5	18.5	53	14.5	—	4	6.5	49	$8.0^{0}_{-0.03}$
57B	65	41.5	18.5	53	14.5	—	4	6.5	49	$8.0^{0}_{-0.03}$

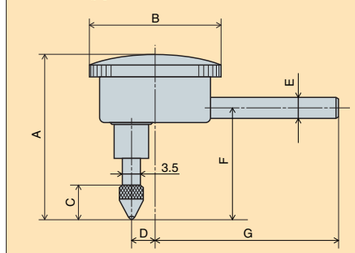
Long Travel 0.01mm 0.005mm 0.1mm (mm)

Model	A	B	C	D	E	F	G	H	I	J
207	90	41	25	66.5	14.5	20	5	7.5	62.5	$8.0^{0}_{-0.03}$
207F-PL	90	41	25	66.5	14.5	—	5	7.5	62.5	$8.0^{0}_{-0.03}$
207F-T	90	41	25	66.5	14.5	—	5	7.5	62.5	$8.0^{0}_{-0.03}$
207S-LL	75	50.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.03}$
207S	75	50.5	18.5	53	14.5	20	4	6.5	49	$8.0^{0}_{-0.03}$
207W	75	50.5	17.5	55	17	20	4	6.5	49	$8.0^{0}_{-0.03}$
207WF-T	75	50.5	17.5	55	17	—	4	6.5	49	$8.0^{0}_{-0.03}$
307S	107	89	22	57	17.5	20	5	7	52	$8.0^{0}_{-0.03}$
307	102	46	22.8	75.5	17.5	21	5	8	72.5	$8.0^{0}_{-0.03}$
507	128	81.5	26.7	81.5	17.5	21.5	5.5	8.5	78.5	$10.0^{0}_{-0.03}$
509	128	81.5	26.7	81.5	17.5	21.5	5.5	8.5	78.5	$10.0^{0}_{-0.03}$
809	201.5	86.5	54	112	24	22.5	6	10	108	$14.0^{0}_{-0.03}$

Miniature 0.01mm 0.005mm (mm)

Model	A	B	C	D	E	F	G	H	I	J
5S	43.2	30.5	12.9	40.8	12.5	—	4	5.1	37	$8.0^{0}_{-0.03}$
47	39.6	20	9.7	36	13	15	3.5	5.8	32	$8.0^{0}_{-0.03}$
47F	39.6	20	9.7	36	13	—	3.5	5.8	32	$8.0^{0}_{-0.03}$
57S	41.3	27.4	10	39	14	19	4	5.1	36.5	$8.0^{0}_{-0.03}$
36A	46.2	30.5	12.9	40.8	12.5	19	4	5.1	37	$8.0^{0}_{-0.03}$
36B	46.2	30.5	12.9	40.8	12.5	19	4	5.1	37	$8.0^{0}_{-0.03}$

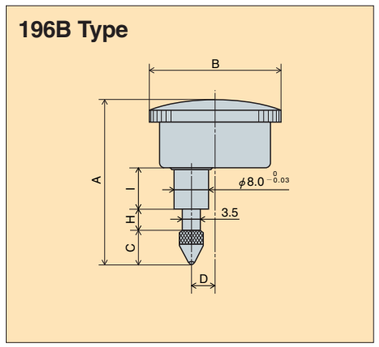
196A Type



Back Plunger 0.01mm (mm)

Model	A	B	C	D	E	F	G
196A	44	38	9	4.5	6.35	28.1	57
196A-6	44	38	9	4.5	6	28.1	57

196B Type



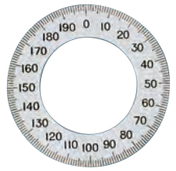
Back Plunger 0.01mm (mm)

Model	A	B	C	D	E	F	G	H	I
196B	58.5	38	12.5	4.5	—	—	—	5.5	16.5
196B-T	58.5	38	12.5	4.5	—	—	—	5.5	16.5
196Z	58.5	38	12.5	4.5	—	—	—	5.5	16.5

Accessories for Dial Gauges

● Outer dial plates

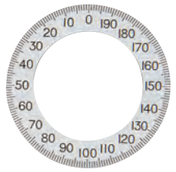
0.001mm type



Continuous Dial A
(0-100-200)

Continuous Dial B
(0-100-100)

Balanced dial
(0-100-0)



Reversed dial A
(±200-100-0)

(Applicable Models)
5B-HG, 5B, 5F, 5-SWF

- We can manufacture outer dials for other 0.001mm dial indicators. (examples: 25, 55, 55-DX)
- We can manufacture outer dials with counter clock wise numbering.

0.01mm type

Continuous Dial A
(0-50-100)

Balanced dial
(0-50-0)

Reversed dial A
(±100-50-0)

(Applicable Models)
107-HG, 107, 107F, 107-SWA, 107-BL, 107F-RE, 107-LL, 17, 57-SWA, 57, 57F.

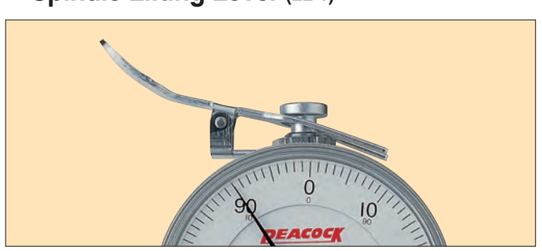
- We can manufacture outer dials for other 0.01mm dial indicators.
(examples: 47, 57S, 36B)

● Color Caps

Red Yellow Green Blue Black

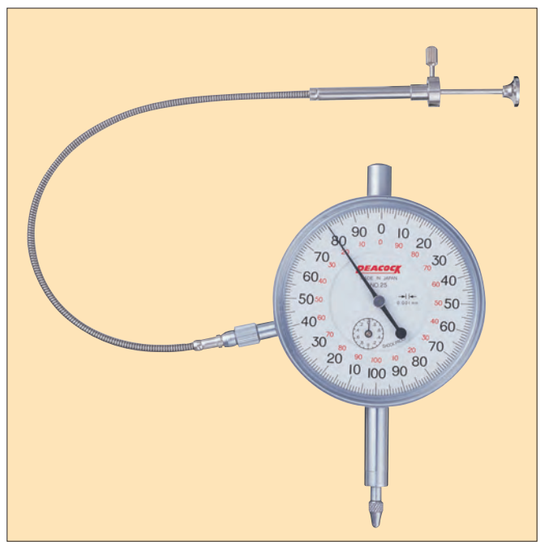
To manage the measurement by dial gauges, caps with five different colors are available. They are attachable to standard dial gauges. (No. 5, 107, 15, 17, 18, 55, 56 and 25S)

● Spindle Lifting Lever (LL-1)



Part No.	Dial Gauge installable
LL-1	107. 107F. 57. 57B. 57F. 17. 17B. 207S. 5B. 5F. 55. 55DX. 25S. 56. 17Z. 15Z. 107W

● Spindle pull-up Release



Part No.	Dial Gauge installable
RE-1 (Total length:275mm)	107F-RE. R1-B.
RE-2 (Total length:287mm)	25F-RE. R1-A.

● Various accessories

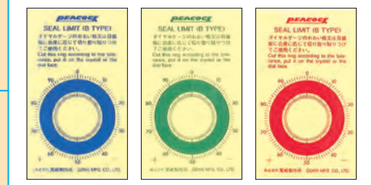
● Easily attachable adhesive limits A type

● Examples of adhesive limits stickers

A-type

B-type

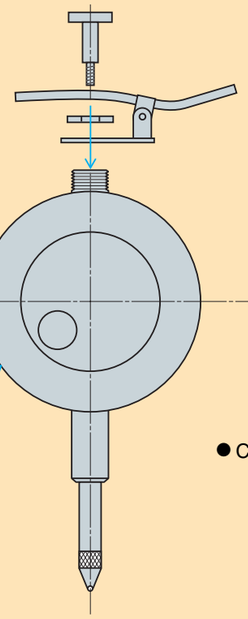
● Easily attachable adhesive limits B type



● Color caps

Red Yellow Green Blue Black

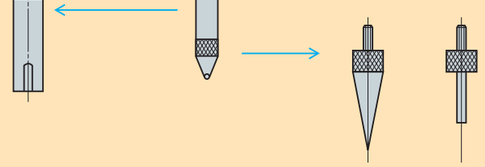
● Spindle Lifting Lever (LL-1)



● Backs

● Contact point joint

● Replaceable contact points



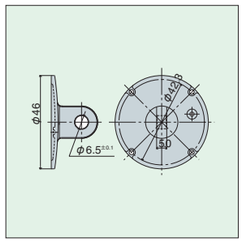
● Outer dial plates

● Backs

The method of holding the dial gauge comes in two types; holding the stem and holding the lug of the back.
However, the back may be replaced for convenience of holding.

❶ Center lug back

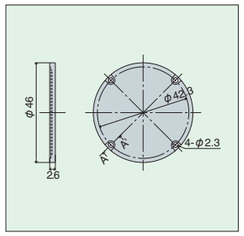
GB-1A



Part No.	Outer dia.	Dial Gauge installable
GB-1A	46.0	107. 107Z. 17Z. 57. 17. 17B. 5Z. 15Z. 207S. 207W. 18. 5B
GB-125	59.5	25. 55. 207
GB-1307	69.8	307
GB-1507	76.7	507. 509
GB-1809	105.0	809
GB-147	30.7	47. 47Z. 47SZ
GB-136	35.8	5S. 36A. 36B
GB-157S	35.3	57S
GB-1DX	50.2	55DX. 56. 107DX. 307S. 25S

❷ Flat back

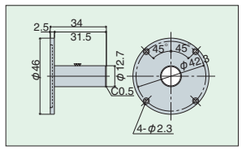
GB-3A



GB-3A	46.0	107. 107Z. 17Z. 57. 17. 17B. 5Z. 15Z. 207S. 207W. 18. 5B
GB-325	59.5	25. 207. 55
GB-3307	69.8	307
GB-3507	76.7	507. 509
GB-3809	105.0	809
GB-347	30.7	47. 47SZ. 47Z
GB-336	35.8	5S. 36A. 36B
GB-357S	35.3	57S
GB-3DX	50.2	55DX. 56. 107DX. 307S. 25S

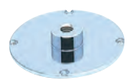
❸ Post back

GB-4A

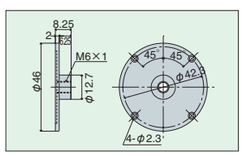


GB-4A	46.0	107. 107Z. 17Z. 57. 17. 17B. 5Z. 15Z. 207S. 207W. 18. 5B
GB-447	30.7	47. 47Z. 47SZ

❹ Screw back



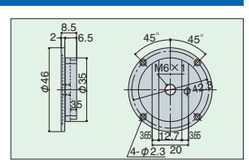
GB-5A



GB-5A	46.0	107. 107Z. 57. 17. 5B. 5Z. 17B. 15Z. 207S. 207W. 18
GB-547	30.7	47. 47Z. 47SZ
GB-536	35.8	5S. 36A. 36B
GB-557S	35.3	57S

❺ Adjustable back

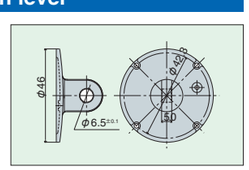
GB-6A



GB-6A	46.0	107. 107Z. 57. 17. 5B. 5Z.
GB-625	59.5	25. 55. 207
GB-647	30.7	47. 47Z. 47SZ
GB-636	35.8	5S. 36A. 36B
GB-657S	35.3	57S

❻ Lug back with lever

GB-7A



GB-7A	46.0	107. 107Z. 57. 17. 5B. 5Z. 17B. 15Z. 17Z. 18. 207S

Repair Tools

● The tools in the table below are available either in a set or individually.

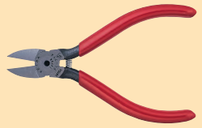
❶ Set in Case

❷ Pointer drawer

This is used to draw out a pointer. Insert the tip of this tool under the pointer, and push the spindle center with thread. The pointer can be drawn out easily.
In this case, the center of pointer drawer should match with the spindle center.

example

❸ Hand drawer



This is used to draw out a hand of gauge. Extend a piece of thin paper between the hand and the dial face. Insert the tip of the tool under the hand, and draw it out in accordance with the principles of the lever.

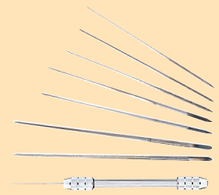
❹ Plus and minus driver set (six in a set)

⊖No.2 (1.4mmW) ⊖No.5 (2.9mmW)
⊖No.3 (2mmW) ⊕No.0 (4mmW)
⊖No.4 (2.4mmW) ⊕No.1 (5mmW)
Select a driver which is suitable for the width of thread head and that of the slot. In particular, please avoid fastening or loosening a large thread using a small driver.

❺ Driver with handle

This is used to a fasten a thread which may be, at first, fastened with small driver, but finally requires to be fastened sufficiently.
(For example, fastening of attaching screw of bottom board.)

❻ Reamer and reamer holder



This is used to enlarge holes for pointer, hand, or spindle center. Stand the reamer in a right angle with the plane, and bore the hole lightly, relaxing your finger as possible as you can.

❼ Clock oil

This is an oil to be lubricated in the course of assembly.

❽ Tweezers

This is used to handle small parts such as hair spring, pointer or small thread.

❾ Pliers

This is used to fasten or loosen a pin or knock.

❿ Washing brush

This is used to remove sticks such as old oil cake and dusts with washing.

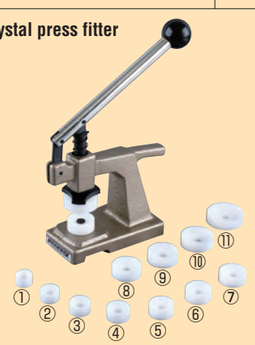
⓫ Blower

This is used, in the course of assembly, to remove dusts sticked to the dial face and so on. When the brush at the tip is removed, this can be used as a pump to blow off dusts. Do not breathe upon the apparatus to blow off dusts.

⓬ Lubrication brush

This is used, in the course of assembly, to lubricate into the spindle center.
Use care to lubricate only a small amount of oil.

⓭ Crystal press fitter



This is to replace crystals.
Set a crystal on the pad. Then press the fitter from the above to reduce the outer diameter, and fit the crystal into the outer frame.

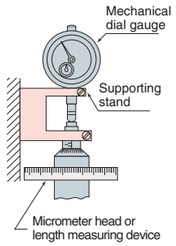
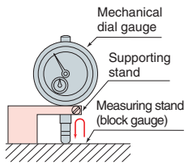
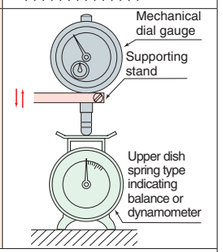
- Cover plate installer is for pressing the cover plate into either the outer frame of a plunger-type dial indicator or a lever-type dial indicator.
- Includes 11 types of changeable frames.
- Changeable frame examples:
  ① and ⑥ : for lever-type dial indicators PC and PCN
  ④ and ⑨ : for small dial indicators
  ⑦ and ⑩ : for standard type 0.001mm and 0.01mm dial indicators
  ⑨ and ⑩ : for long stroke dial indicators
- Changeable frame sizes (mm):

① φ19 ② φ21 ③ φ23 ④ φ25 ⑤ φ27.5 ⑥ φ29 ⑦ φ31 ⑧ φ33 ⑨ φ35 ⑩ φ38.5 ⑪ φ45

Technical Data

Dial Indicators JIS B 7503 : 2017 (Japan Industrial Standards)

Methods of measuring of performance

Measurement item		Applicable type	Measuring method (Fixed zero method)	Evaluation method (Transferring zero method)	Example of measurement
Error of indication	Error of indication over the whole measuring range	Dial gauge with multiple revolutions and dial gauge with partial revolution	Fix the dial gauge rigidly in a supporting stand, move the contact element successively in the forward direction, and read the errors of indication [a] at the following measuring points. ・From the starting point to 2nd revolution, at every 1/10 revolution of the pointer [b] ・From 2nd to 5th revolution, at every 1/2 revolution of the pointer ・From 5th to 10th revolution, at every one revolution of the pointer ・From 10th to 50th revolution, at every 5 revolutions ・From 50th revolution and onward, at every 10 revolutions After pressing in the contact element so that the pointer shifts by three or more scale divisions from the end point of the measuring range, move the contact element in the retrace direction successively and read the errors of indication at the same points as measured in the forward direction.	Obtain the difference between the maximum and minimum errors of indication at all measuring points in both forward and retrace directions.	
	Error of indication over 1/10 revolution			Obtain the maximum value of difference in errors of indication between any two adjacent measuring points at every 1/10 rotation from the starting point to 2nd revolution in both forward and retrace directions [c].	
	Error of indication over 1/2 revolution	Dial gauge with multiple revolutions		Obtain the maximum value of difference between the largest and smallest errors of indication read at every 1/2 revolution within the measuring range from the starting point to 5th revolution, in both forward and retrace directions.	
	Error of indication over one revolution			Obtain the maximum value of difference between the largest and smallest errors of indication read at every one revolution within the measuring range from the starting point to 10th revolution, in both forward and retrace directions.	
	Hysteresis Error	Dial gauge with multiple revolutions and dial gauge with partial revolution		Obtain the maximum value of difference between errors of indication taken in the forward direction and those taken at the corresponding measuring points in the retrace direction.	
Repeatability		Dial gauge with multiple revolutions and dial gauge with partial revolution	Fix the dial gauge in a supporting stand, and after pressing in the contact element to a desired position within the measuring range, allow it to retract quickly or slowly five times and take a reading at each point.	Determine the maximum difference between the five indications obtained.	
Measuring force			Fix the dial gauge in a supporting stand, and move the contact element in the forward and retrace directions continuously and gradually and take measurements of the measuring force at the starting point and end point.	Determine the maximum value of the readings (maximum measuring force) and minimum value of the readings (minimum measuring force) and also determine the differences in the readings between corresponding measuring points in forward and retrace directions.	

Notes
a) For reading of errors, either read the input quantity of the measuring device with the pointer of the dial gauge adjusted at a scale graduation, or read the indication of the dial gauge according to the displacement of the measuring device.
b) For dial gauge with partial revolution, read errors at every 10 scale divisions.
c) For dial gauge with partial revolution, obtain the maximum value of difference in errors of indication between any two adjacent measuring points at every 10 scale divisions.

Dial Indicators JIS B 7503 : 2017 (Japan Industrial Standards)

Performance of vertical (standard type) dial gauges with bezel diameters not less than 50mm [maximum permissible error (MPE)]

Performance		Scale interval (mm)											
		0.01								0.005	0.001		
		Measuring range (mm)											
		1 or under	Over 1 up to and incl. 3	Over 3 up to and incl. 5	Over 5 up to and incl. 10	Over 10 up to and incl. 20	Over 20 up to and incl. 30	Over 30 up to and incl. 50	Over 50 up to and incl. 100	5 or under	1 or under	Over 1 up to and incl. 2	Over 2 up to and incl. 5
Error of indication (MPE) (μm)	1/10 revolution	5	5	5	5	8	10	10	12	5	2	2	3.5
	1/2 revolution	8	8	9	9	10	12	12	17	9	3.5	4	5
	one revolution	8	9	10	10	15	15	15	20	10	4	5	6
	Whole measureing range	8	10	12	15	25	30	40	50	12	5	7	10
Hysteresis error	(MPE_H) (μm)	3	3	3	3	5	7	8	9	3	2	2	3
Repeatability	(MPE_R) (μm)	3	3	3	3	4	5	5	5	3	0.5	0.5	1
For the MPE of dial gauge with partial revolution, the error of indication over 1/2 revolution or one revolution is not specified.													

Performance of dial gauges with bezel diameters less than 50mm and horizontal (back plunger type) dial gauges [maximum permissible error (MPE)]

Performance		Scale interval (mm)						
		0.01				0.005	0.002	0.001
		Measuring range (mm)						
		1 or under	Over 1 up to and incl. 3	Over 3 up to and incl. 5	Over 5 up to and incl. 10	5 or under	1 or under	1 or under
Error of indication (MPE) (μm)	1/10 revolution	8	8	8	9	6	2.5	2.5
	1/2 revolution	11	11	12	12	9	4.5	4
	one revolution	12	12	14	14	10	5	4.5
	Whole measureing range	15	16	18	20	12	6	5
Hysteresis error	(MPE_H) (μm)	4	4	4	5	3.5	2.5	2
Repeatability	(MPE_R) (μm)	3	3	3	3	3	1	1
For the MPE of dial gauge with partial revolution, the error of indication over 1/2 revolution or one revolution is not specified.								

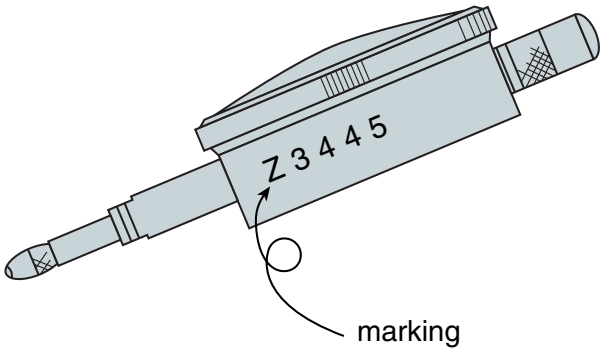
Measuring force of mechanical dial gauge [maximum permissible limit (MPL)]

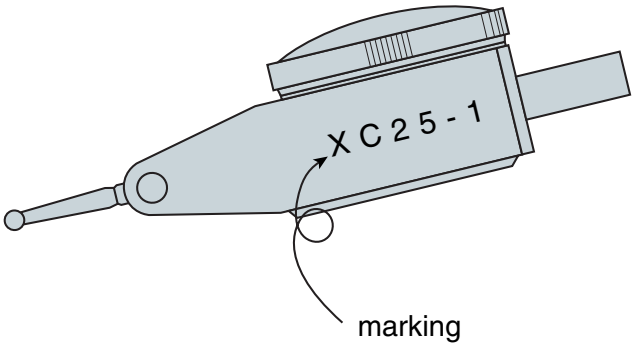
Performance	Measuring range (mm)			
	10 or under	Over 10 up to and incl. 30	Over 30 up to and incl. 50	Over 50 up to and incl. 100
Maximum (N)	2.0 max	2.5 max	3.0 max	3.5 max
Minimum (N)	To be defined by the manufacturer.			
Hysteresis (N)				

Marking Service

To all our valued customers :

When you purchase any new PEACOOK gauges from us, we now offer an optional value adding free making services of Control Numbers directly onto gauges for your ISO needs; any other control needs and for planned future needs.





●Marking is made by an ultrasonic method.

Character size, spacing between characters and its direction can specifically be set under the following ranges :

Character size (heigt) — 1.0 to 10 mm
(at intervals of 0.1mm, at variable step)
max. 10 characters

Numbers of characters — • Alpabet-Capital letters (26)

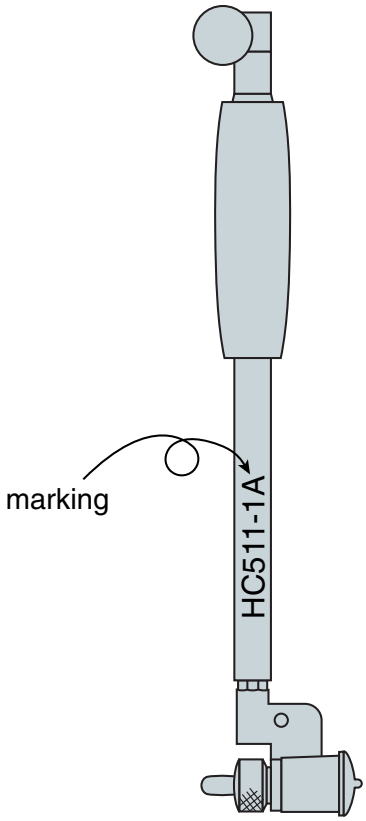
Caracters of making — A B C D E F ····· X Y Z

• Alphabet-Small letters (26)
a b c d e f ·····x y z

• Numeric characters (10)
0 1 2 3 4 5 6 7 8 9

• Symbols (18)
＋－×／±＝（）＜＞［］￥：。，・．

• Standard font (Helvetica)



SECTION

2

Lever Type Dial Indicators Pic Test • New Pic Test

- PCN Series
- W Series
- Z Series
- E Series
- U Series
- D Series
- PC Series
- R Series *"NEW"*
- V Series
- DS8V Series *"NEW"*
- Accessories
- PK-TEST

Lever Type Dial Indicators NEW PIC TEST

Without change lever PCN series

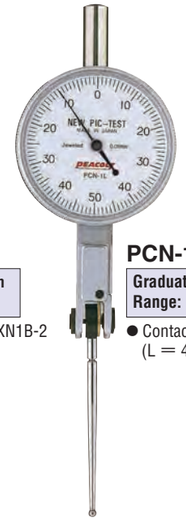
The New Pic Test is a lever type dial indicators used in all over the world.
It is a measuring instrument used for measurements of restricted areas, and the outside／inside, groove width and centering with the dial gauge installed to the lathe or the milling cutting machine for measurements with the gauges held on the height gauges.

- **Without change lever (Automatic inverse type)**
  The lever type dial gauge of this type has no change lever, the contact point inverses automatically in normal or reverse direction as desired and pointer turns always CW to improve the measuring efficiency.
- **Miniature Bearing Used**
  The miniature bearing used as a bearing at the pivot of the contact point to show good indication stability without any effect by rod play.
- **O-ring used**
  Oil resistance is enhanced by seating the O-ring in the turning section of the outer frame.

PCN-0
Graduation: 0.01mm
Range: 0.5mm
- Small dial face (ϕ 29)
- Contact Point No. XN1A-2

PCN-1A
Graduation: 0.01mm
Range: 0.5mm
- Contact Point No. XN1A-2

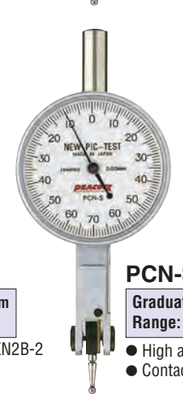
PCN-1B
Graduation: 0.01mm
Range: 0.8mm
- Contact Point No. XN1B-2



PCN-1L
Graduation: 0.01mm
Range: 1.0mm
- Contact Point No. XN1L-2 (L = 42.8mm)

PCN-2
Graduation: 0.002mm
Range: 0.28mm
- Contact Point No. XN2-2

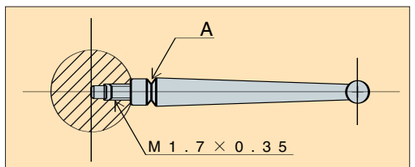
PCN-2B
Graduation: 0.002mm
Range: 0.2mm
- Contact Point No. XN2B-2



PCN-S
Graduation: 0.001mm
Range: 0.14mm
- High accuracy
- Contact Point No. XNS-2

PCN-7A
Graduation: 0.01mm
Range: 1.5mm
- Wide measuring range
- with Shorter Pointer
- Contact Point No. XN1A-2

PCN-7C
Graduation: 0.002mm
Range: 0.6mm
- Wide measuring range
- with Shorter Pointer
- Contact Point No. XN2B-2



- Gauge Anti-break Measuring Element.
  When a force is applied to the contact point in the lateral direction, it is bent at the groove of section A to protect the gauges.

※ The contact point can simply replaced (See page P58).

Vertical

PCN-5
Graduation: 0.01mm
Range: 0.5mm
- Contact Point No. XN1A-2

Vertical

PCN-6
Graduation: 0.002mm
Range: 0.28mm
- Contact Point No. XN2-2

New **Vertical**

PCN-6S
Graduation: 0.001mm
Range: 0.14mm
- Contact Point No. XNS-2

Specifications

Model	Graduation (mm)	Range (mm)	Reading	Accuracy MPE (μm)					Measuring force less than(N)
				10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PCN-0	0.01	0.5	0 - 25 - 0	5	—	6	4	3	0.3
PCN-1A	0.01	0.5	0 - 25 - 0	5	—	6	4	3	0.3
PCN-1B	0.01	0.8	0 - 40 - 0	5	—	9	4	3	0.3
PCN-1L	0.01	1.0	0 - 50 - 0	5	—	10	5	3	0.3
PCN-2	0.002	0.28	0 - 140 - 0	2	—	4	3	1	0.3
PCN-2B	0.002	0.2	0 - 100 - 0	2	—	4	3	1	0.3
PCN-S	0.001	0.14	0 - 70 - 0	2	—	4	3	1	0.3
PCN-7A	0.01	1.5	0 - 25 - 0	5	10	16	5	3	0.3
PCN-7C	0.002	0.6	0 - 100 - 0	2	5	7	4	1	0.3
PCN-5	0.01	0.5	0 - 25 - 0	5	—	6	4	3	0.3
PCN-6	0.002	0.28	0 - 140 - 0	2	—	4	3	1	0.3
New **PCN-6S**	0.001	0.14	0 - 70 - 0	2	—	4	3	1	0.3

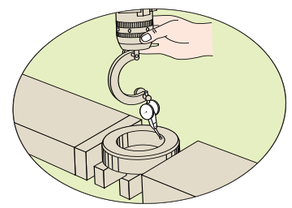
Special Type Test Indicators

Double Dial Type W series

- The conventional lever type dial gauge used to have some unreadable points when aligning with it, which has made it impossible to do the accurate aligning till now.
  The double dial type Pic Test has two dials at both sides, making it possible to cover said unreadable points by conventional Pic Tests.

PC-1BW
Graduation: 0.01mm
Range: 0.8mm
- Change lever type
- Contact Point No. XP1B-2

Alignment work



With Dual dial type, readings can be made easily even if gauges is turned 180 deg.

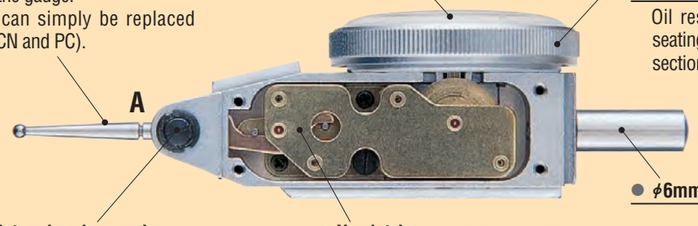
Specifications

Model	Graduation (mm)	Range (mm)	Reading	Accuracy MPE (μm)					Measuring force less than(N)
				10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PC-1BW	0.01	0.8	0 - 40 - 0	5	—	9	4	3	0.4

Special Type Test Indicators

One Revolution Z series (without change lever type)

The dial face is easy to read with light yellow and blue (dead zone)



- **Gauge Anti-break Measuring Element**
  When a force is applied to the contact point in the lateral direction, it is bent at the groove of section **A** to protect the gauge.
  The contact point can simply be replaced (adopted in all the PCN and PC).
- **Dial face with colored limit**
  To check out of tolerance detection and testing easier.
- **Dust and Oil resistant O-ring (inside bezel)**
  Oil resistance is enhanced by seating the O-ring in the turning section of the outer frame.
- **φ6mm SK quenched stem**
- **Super sensitive miniature bearing used**
  The miniature bearing is used as a bearing at the pivot of the contact point to show stable indication without any effect by rod play.
- **No clutch (automatic inverse type)**
  The Pic Test Indicator of this type has no bias lever, the contact point inverse automatically in the normal or reverse direction as desired and the pointer turns always CW to improve the measuring efficiency.

"A" type Downward

PCN-1BZ(A)
Graduation: 0.01mm
Range: 0.6mm
● Contact Point No. XN1B-2

PCN-1LZ(A)
Graduation: 0.01mm
Range: 0.8mm
● Contact Point No. XN1L-2

PCN-2Z(A)
Graduation: 0.002mm
Range: 0.2mm
● High accuracy
● Contact Point No. XN2-2

Specifications

Model	Graduation (mm)	Range (mm)	Movable Range (mm)	Accuracy MPE (μm)					Measuring force less than(N)
				10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PCN-1BZ(A)	0.01	0.6	0.7	5	—	9	4	3	0.3
PCN-1LZ(A)	0.01	0.8	0.9	5	—	10	5	3	0.3
PCN-2Z(A)	0.002	0.2	0.24	2	—	4	3	1	0.3

"B" type Upward

PCN-1BZ(B)
Graduation: 0.01mm
Range: 0.6mm
● Contact Point No. XN1B-2

PCN-1LZ(B)
Graduation: 0.01mm
Range: 0.8mm
● Contact Point No. XN1L-2

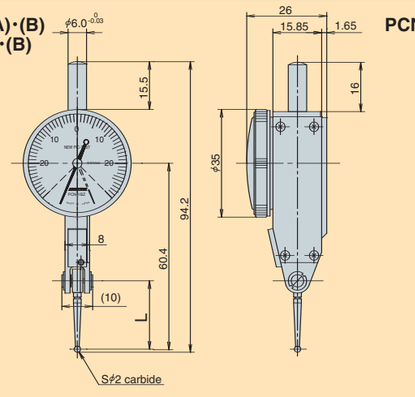
PCN-2Z(B)
Graduation: 0.002mm
Range: 0.2mm
● High accuracy
● Contact Point No. XN2-2

Specifications

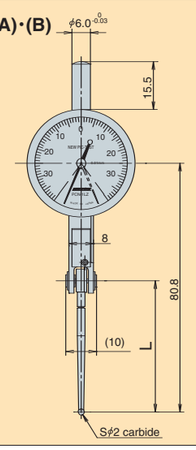
Model	Graduation (mm)	Range (mm)	Movable Range (mm)	Accuracy MPE (μm)					Measuring force less than(N)
				10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PCN-1BZ(B)	0.01	0.6	0.7	5	—	9	4	3	0.3
PCN-1LZ(B)	0.01	0.8	0.9	5	—	10	5	3	0.3
PCN-2Z(B)	0.002	0.2	0.24	2	—	4	3	1	0.3

Dimensions

PCN-1BZ (A)·(B)
PCN-2Z (A)·(B)



PCN-1LZ (A)·(B)



● Length of Contact Point

Model	L (mm)
PCN-1BZ(A) PCN-1BZ(B)	22.2
PCN-2Z(A) PCN-2Z(B)	17.94
PCN-1LZ(A) PCN-1LZ(B)	42.8

Special Type Test Indicators

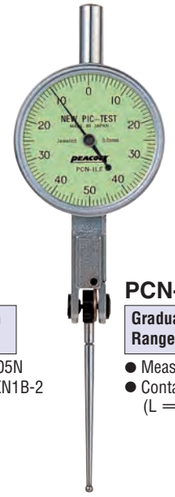
Super low measuring force E series

Lever dial gauge that is suitable for flaw-free measure of an object under measurement and for measurement of plastic products with a low measuring force.
A measuring force is 0.05N, 0.1N or less that is lower than a 0.4N measuring force in the conventional dial gauges.
Specifications and outer dimensions are the same as those of standard PC and PCN types, except a measuring force.

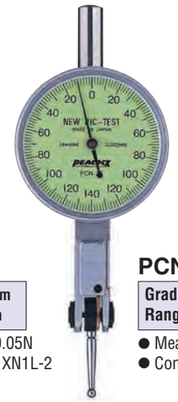
Without change lever type (CW rotation only)

PCN-1AE
Graduation: 0.01mm
Range: 0.5mm
- Measuring force 0.05N
- Contact Point No. XN1A-2

PCN-1BE
Graduation: 0.01mm
Range: 0.8mm
- Measuring force 0.05N
- Contact Point No. XN1B-2



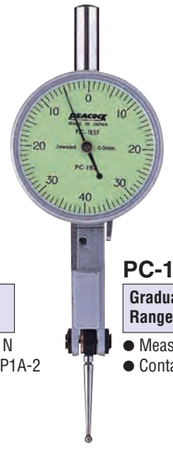
PCN-1LE
Graduation: 0.01mm
Range: 1.0mm
- Measuring force 0.05N
- Contact Point No. XN1L-2 (L = 42.8mm)



PCN-2E
Graduation: 0.002mm
Range: 0.28mm
- Measuring force 0.1N
- Contact Point No. XN2-2

Change lever type

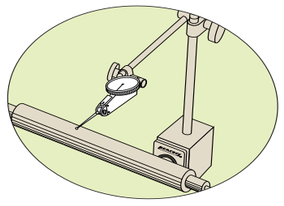
PC-1AE
Graduation: 0.01mm
Range: 0.5mm
- Measuring force 0.1N
- Contact Point No. XP1A-2



PC-1BE
Graduation: 0.01mm
Range: 0.8mm
- Measuring force 0.1N
- Contact Point No. XP1B-2

PC-1LE
Graduation: 0.01mm
Range: 1.0mm
- Measuring force 0.1N
- Contact Point No. XP1L-2 (L = 43.0mm)

Measuring of deviation on rubber roller



With extra low measuring force, work piece can be measured without deforming it.

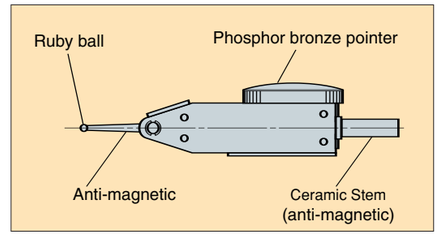
Specifications

Model	Graduation (mm)	Range (mm)	Reading	Accuracy MPE (μm)					Measuring force less than(N)
				10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PCN-1AE	0.01	0.5	0 - 25 - 0	5	–	6	4	3	0.05
PCN-1BE	0.01	0.8	0 - 40 - 0	5	–	9	4	3	0.05
PCN-1LE	0.01	1.0	0 - 50 - 0	5	–	10	5	3	0.05
PCN-2E	0.002	0.28	0 - 140 - 0	2	–	4	3	1	0.1
PC-1AE	0.01	0.5	0 - 25 - 0	5	–	6	4	3	0.1
PC-1BE	0.01	0.8	0 - 40 - 0	5	–	9	4	3	0.1
PC-1LE	0.01	1.0	0 - 50 - 0	5	–	10	5	3	0.1

Special Type Test Indicators

Non-electrifying & Complete Anti-magnetic U series

When non-electrifying type of Pic Test or New Pic Test is used, electric flow is blocked at the ceramic stem, even of a magnetic stand is electrified. Thus, you can continue your work without any problem.
The dial face is light blue color and easy to read.
Specifications and outer dimensions are the same as those of standard PCN types, except the portion of stems.



Without change lever type (CW rotation only)

PCN-1AU
Graduation: 0.01mm
Range: 0.5mm
- Contact Point No. XN1A-2R

PCN-1BU
Graduation: 0.01mm
Range: 0.8mm
- Contact Point No. XN1B-2R

PCN-1LU
Graduation: 0.01mm
Range: 1.0mm
- Contact Point No. XN1-2R (L=42.8mm)

PCN-2U
Graduation: 0.002mm
Range: 0.28mm
- Contact Point No. XN2-2R

PCN-2BU
Graduation: 0.002mm
Range: 0.2mm
- Contact Point No. XN2B-2R

PCN-SU
Graduation: 0.001mm
Range: 0.14mm
- High accuracy
- Contact Point No. XNS-2R

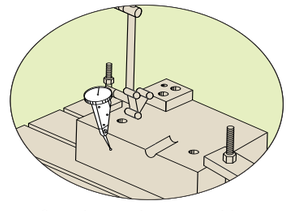
Vertical

PCN-5U
Graduation: 0.01mm
Range: 0.5mm
- Contact Point No. XN1A-2R

Vertical

PCN-6U
Graduation: 0.002mm
Range: 0.28mm
- Contact Point No. XN2-2R

Electric discharge machining



Ceramic stem is supported by a magnetic stand.
Electric current is isolated by the ceramic stem.
It is thus possible to measure the work piece without electrifying it.

Specifications

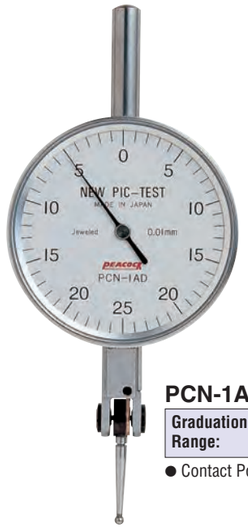
Model	Graduation (mm)	Range (mm)	Reading	Accuracy MPE (μm)					Measuring force less than(N)
				10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PCN-1AU	0.01	0.5	0 - 25 - 0	5	–	6	4	3	0.3
PCN-1BU	0.01	0.8	0 - 40 - 0	5	–	9	4	3	0.3
PCN-1LU	0.01	1.0	0 - 50 - 0	5	–	10	5	3	0.3
PCN-2U	0.002	0.28	0 - 140 - 0	2	–	4	3	1	0.3
PCN-2BU	0.002	0.2	0 - 100 - 0	2	–	4	3	1	0.3
PCN-SU	0.001	0.14	0 - 70 - 0	2	–	4	3	1	0.3
PCN-5U	0.01	0.5	0 - 25 - 0	5	–	6	4	3	0.3
PCN-6U	0.002	0.28	0 - 140 - 0	2	–	4	3	1	0.3

Special Type Test Indicators

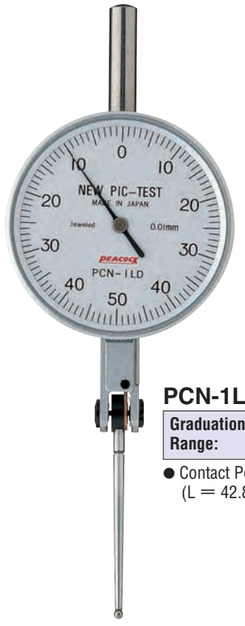
Large dial face D series

The dial plate size of PCN-1A, PCN-1L, PCN-2B, and PCN-S models has been enlarged, with easy reading due to the lager scale spacing, as a result.
Screw type long stems are standard for these large dial face test indicators.

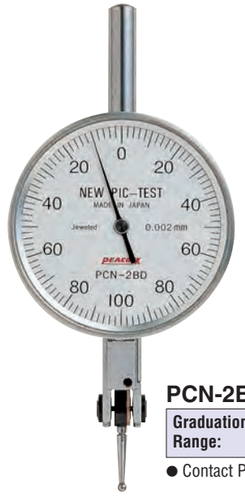
Without change lever type (CW rotation only)



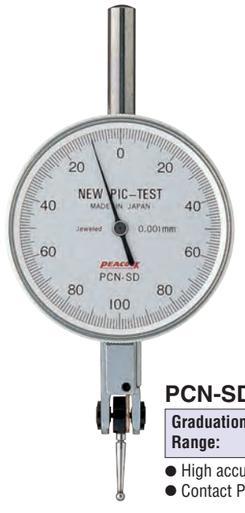
PCN-1AD
Graduation: 0.01mm
Range: 0.5mm
● Contact Point No. XN1A-2



PCN-1LD
Graduation: 0.01mm
Range: 1mm
● Contact Point No. XN1L-2
(L = 42.8mm)

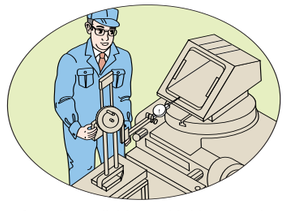


PCN-2BD
Graduation: 0.002mm
Range: 0.2mm
● Contact Point No. XN2B-2



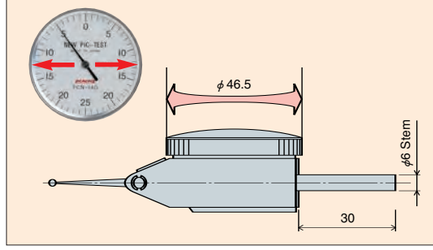
PCN-SD
Graduation: 0.001mm
Range: 0.2mm
● High accuracy
● Contact Point No. XN2B-2

Easy to read



An enlarge dial face with bigger scale intervals enables easy reading by user of all ages.

Large Size Dial Face



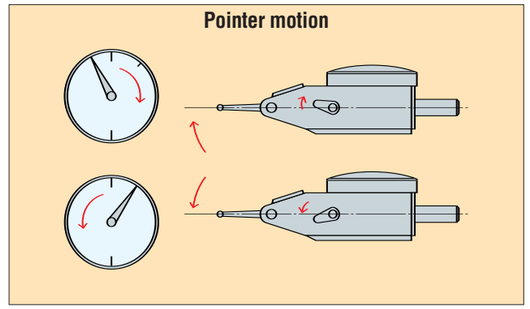
Specifications

Model	Graduation (mm)	Range (mm)	Reading	Accuracy MPE (μm)					Measuring force less than(N)
				10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PCN-1AD	0.01	0.5	0 - 25 - 0	5	—	6	4	3	0.3
PCN-1LD	0.01	1.0	0 - 50 - 0	5	—	10	5	3	0.3
PCN-2BD	0.002	0.2	0 - 100 - 0	2	—	4	3	1	0.3
PCN-SD	0.001	0.2	0 - 100 - 0	2	—	4	3	1	0.3

Lever Type Dial Indicators PIC TEST

Change lever type PC series

● Miniature Bearing Used
The miniature bearing used as a bearing at the pivot of the contact point to show good indication stability without any effect by rod play.
● O-ring used
Oil resistance is enhanced by seating the O-ring in the turning section of the outer frame.



PC-1A
Graduation: 0.01mm
Range: 0.5mm
● Contact Point No. XP1A-2

PC-1B
Graduation: 0.01mm
Range: 0.8mm
● Contact Point No. XP1B-2

PC-1L
Graduation: 0.01mm
Range: 1.0mm
● Contact Point No. XP1L-2
(L = 43.0mm)

PC-2
Graduation: 0.002mm
Range: 0.28mm
● Contact Point No. XP2-2

Parallel

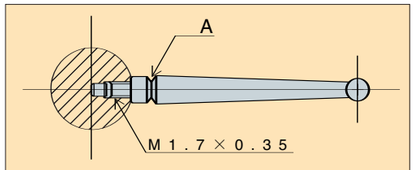
PC-3
Graduation: 0.01mm
Range: 0.5mm
● Contact Point No. XP1A-2

Parallel
New

PC-3L
Graduation: 0.01mm
Range: 1.0mm
● Contact Point No. XP1L-2

Parallel

PC-4
Graduation: 0.002mm
Range: 0.28mm
● Contact Point No. XP2-2



● Gauge Anti-break Measuring Element.
When a force is applied to the contact point in the lateral direction, it is bent at the groove of section A to protect the gauges.

※ The contact point can simply replaced (See page P58).

Specifications

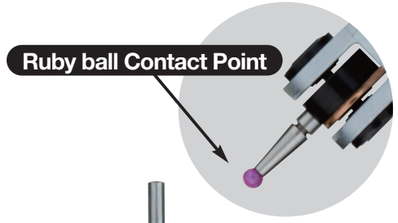
Model	Graduation (mm)		Range (mm)	Reading		Accuracy MPE (μm)					Measuring force less than(N)
						10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PC-1A	0.01	0.5	0 - 25 - 0	5	—	6	4	3	0.4		
PC-1B	0.01	0.8	0 - 40 - 0	5	—	9	4	3	0.4		
PC-1L	0.01	1.0	0 - 50 - 0	5	—	10	5	3	0.4		
PC-2	0.002	0.28	0 - 140 - 0	2	—	4	3	1	0.4		
PC-3	0.01	0.5	0 - 25 - 0	5	—	6	4	3	0.4		
PC-3L	0.01	1.0	0 - 50 - 0	5	—	10	5	3	0.4		
PC-4	0.002	0.28	0 - 140 - 0	2	—	4	3	1	0.4		

PIC TEST/NEW PIC TEST PC · PCN

New

PIC TEST/NEW PIC TEST with Ruby ball Contact Point "R" series
(Contact Point ball dia. 2mm Only)

- Excellent wear resistance
- Non-electrifying and Anti-magnetic
- Can be used on Electrical Discharge Machine



Horizontal

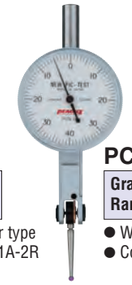
PC-1AR
Graduation: 0.01mm
Range: 0.5mm
- Change Lever type
- Contact Point No. XP1A-2R

PC-1BR
Graduation: 0.01mm
Range: 0.8mm
- Change Lever type
- Contact Point No. XP1B-2R

PC-1LR
Graduation: 0.01mm
Range: 1.0mm
- Change Lever type
- Contact Point No. XP1L-2R

PC-2R
Graduation: 0.002mm
Range: 0.28mm
- Change Lever type
- High accuracy
- Contact Point No. XP2-2R

PCN-1AR
Graduation: 0.01mm
Range: 0.5mm
- Without Change Lever type
- Contact Point No. XN1A-2R



PCN-1BR
Graduation: 0.01mm
Range: 0.8mm
- Without Change Lever type
- Contact Point No. XN1B-2R

PCN-1LR
Graduation: 0.01mm
Range: 1.0mm
- Without Change Lever type
- Contact Point No. XN1L-2R

PCN-2R
Graduation: 0.002mm
Range: 0.28mm
- Without Change Lever type
- High accuracy
- Contact Point No. XN2-2R

PCN-2BR
Graduation: 0.002mm
Range: 0.2mm
- Without Change Lever type
- High accuracy
- Contact Point No. XN2B-2R

PCN-SR
Graduation: 0.001mm
Range: 0.14mm
- Without Change Lever type
- High accuracy
- Contact Point No. XNS-2R

Vertical

PCN-5R
Graduation: 0.01mm
Range: 0.5mm
- Without Change Lever type
- Contact Point No. XN1A-2R

PCN-6R
Graduation: 0.002mm
Range: 0.28mm
- Without Change Lever type
- High accuracy
- Contact Point No. XN2-2R

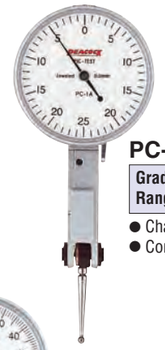
Specifications

Model	Graduation (mm)	Range (mm)	Reading	Accuracy MPE (μm)					Measuring force less than(N)
				10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PC-1AR	0.01	0.5	0 - 25 - 0	5	–	6	4	3	0.4
PC-1BR	0.01	0.8	0 - 40 - 0	5	–	9	4	3	0.4
PC-1LR	0.01	1.0	0 - 50 - 0	5	–	10	5	3	0.4
PC-2R	0.002	0.28	0 - 140 - 0	2	–	4	3	1	0.4
PCN-1AR	0.01	0.5	0 - 25 - 0	5	–	6	4	3	0.3
PCN-1BR	0.01	0.8	0 - 40 - 0	5	–	9	4	3	0.3
PCN-1LR	0.01	1.0	0 - 50 - 0	5	–	10	5	3	0.3
PCN-2R	0.002	0.28	0 - 140 - 0	2	–	4	3	1	0.3
PCN-2BR	0.002	0.2	0 - 100 - 0	2	–	4	3	1	0.3
PCN-SR	0.001	0.14	0 - 70 - 0	2	–	4	3	1	0.3
PCN-5R	0.01	0.5	0 - 25 - 0	5	–	6	4	3	0.3
PCN-6R	0.002	0.28	0 - 140 - 0	2	–	4	3	1	0.3

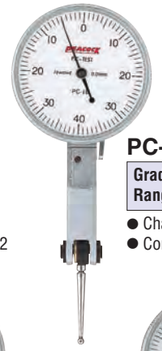
Special Type Test Indicators

Without fixed Stem "V" series

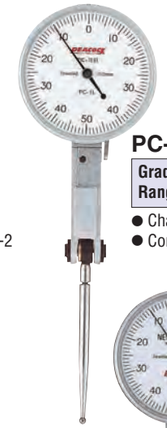
- **Without fixed stem**
  This is suited for users, who do not mount the indicator by fixed Stem.
- **Dovetail Stems are available**
  Mount the indicator by Dovetail on 3 positions on the body. Dovetail Stem, DS-4 (φ4), DS-6 (φ6) and DS-8 (φ8) are available as optional accessories.
- **Miniature Bearing used**
  The miniature bearing used as a bearing at the pivot of the contact point to show good indication stability.
- **Contact Point for Gauge anti-breakage**
  All of our pic test indicator has gauge anti-breakage contact point.
- **O-ring used**
  Oil resistance is enhanced by seating the O-ring between inner and outer frames.



PC-1AV
Graduation: 0.01mm
Range: 0.5mm
- Change Lever type
- Contact Point No. XP1A-2



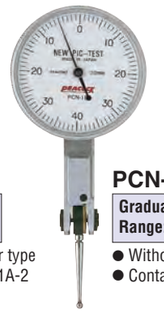
PC-1BV
Graduation: 0.01mm
Range: 0.8mm
- Change Lever type
- Contact Point No. XP1B-2



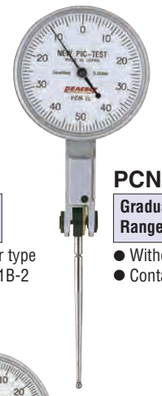
PC-1LV
Graduation: 0.01mm
Range: 1.0mm
- Change Lever type
- Contact Point No. XP1L-2

PC-2V
Graduation: 0.002mm
Range: 0.28mm
- Change Lever type
- High accuracy
- Contact Point No. XP2-2

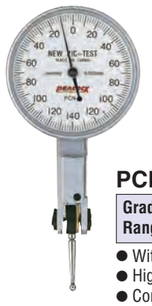
PCN-1AV
Graduation: 0.01mm
Range: 0.5mm
- Without Change Lever type
- Contact Point No. XN1A-2



PCN-1BV
Graduation: 0.01mm
Range: 0.8mm
- Without Change Lever type
- Contact Point No. XN1B-2



PCN-1LV
Graduation: 0.01mm
Range: 1.0mm
- Without Change Lever type
- Contact Point No. XN1L-2



PCN-2V
Graduation: 0.002mm
Range: 0.28mm
- Without Change Lever type
- High accuracy
- Contact Point No. XN2-2

PCN-2BV
Graduation: 0.002mm
Range: 0.2mm
- Without Change Lever type
- High accuracy
- Contact Point No. XN2B-2

PCN-SV
Graduation: 0.001mm
Range: 0.14mm
- Without Change Lever type
- High accuracy
- Contact Point No. XNS-2

Specifications

Model	Graduation (mm)	Range (mm)	Reading	Accuracy MPE (μm)					Measuring force less than(N)
				10 Scale	1 Rev.	Wide-range Forward accuracy	Hysteresis	Repeatability	
PC-1AV	0.01	0.5	0 - 25 - 0	5	–	6	4	3	0.4
PC-1BV	0.01	0.8	0 - 40 - 0	5	–	9	4	3	0.4
PC-1LV	0.01	1.0	0 - 50 - 0	5	–	10	5	3	0.4
PC-2V	0.002	0.28	0 - 140 - 0	2	–	4	3	1	0.4
PCN-1AV	0.01	0.5	0 - 25 - 0	5	–	6	4	3	0.3
PCN-1BV	0.01	0.8	0 - 40 - 0	5	–	9	4	3	0.3
PCN-1LV	0.01	1.0	0 - 50 - 0	5	–	10	5	3	0.3
PCN-2V	0.002	0.28	0 - 140 - 0	2	–	4	3	1	0.3
PCN-2BV	0.002	0.2	0 - 100 - 0	2	–	4	3	1	0.3
PCN-SV	0.001	0.14	0 - 70 - 0	2	–	4	3	1	0.3

PIC TEST / NEW PIC TEST PC・PCN

"DS8V" series

● We can provide all of our PIC TEST/NEW PIC TEST with ϕ 8mm Dovetail Stem to meet with your holding device.
(except Model PC-1BW, PC-1LW)

PC-1B-DS8V
Graduation: 0.01mm
Range: 0.8mm

PC-IL-DS8V
Graduation: 0.01mm
Range: 1.0mm

PC-4-DS8V
Graduation: 0.002mm
Range: 0.28mm

PCN-1B-DS8V
Graduation: 0.01mm
Range: 0.8mm

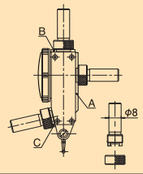
PCN-2-DS8V
Graduation: 0.002mm
Range: 0.28mm

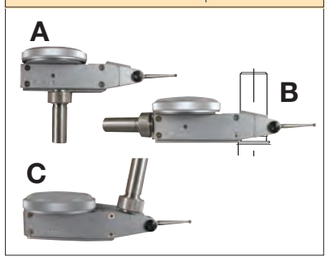
PCN-S-DS8V
Graduation: 0.001mm
Range: 0.14mm

Set in Case

Example

Dovetail : A. B. C



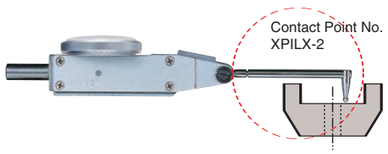


Right Angle Contact Point for PIC TEST (PAT.No.3065810)

Unique Contact Point not existing before!

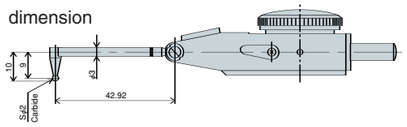
Contact Point Part No. XPILX-2

A Contact Point end bent at a right has made it possible to make a measurement of an object that used to be impossible to measure! Set the Contact Point so that it is horizontal and perpendicular to work.



The Contact Point enable a measurement of a recessed portion located at the back of a project portion that would not be possible by the use of an existing Contact Point.

dimension



Also makes it possible to measure the parallelism and run-out of grooves on diffrent levels.

Accessories (Option)

● **Replaceable contact point (carbide ball)**

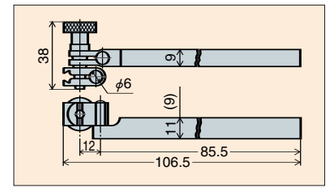
S ϕ 0.5mm
S ϕ 0.8mm
S ϕ 1mm
S ϕ 2mm (Standard)
S ϕ 3.0mm
S ϕ 2.0mm (Ruby ball)

● **Pic test holder**

PTH-1

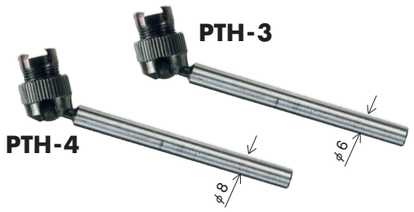
PTH-2

PTH-0
(Head only)



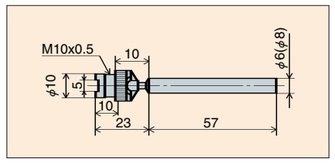
PTH-1・2 ( ) PTH-2

● **Universal holder**



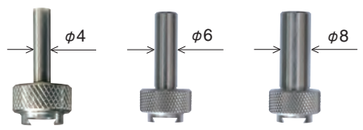
PTH-3

PTH-4



PTH-3・4 ( ) PTH-4

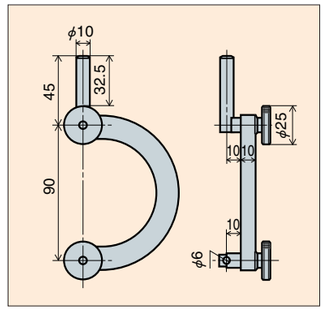
● **Dovetail stem**

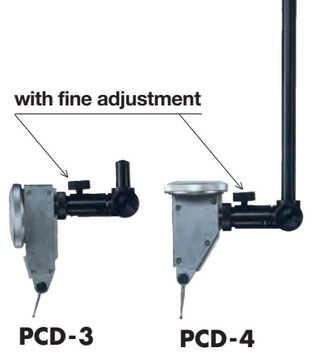


DS-4 (ϕ4)
DS-6 (ϕ6)
DS-8 (ϕ8)

● **Centricator (Pic Test Indicators supplied on request)**

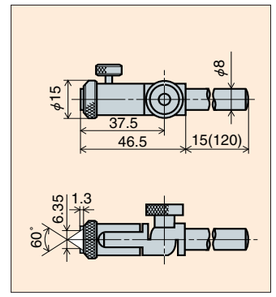
PCD-2



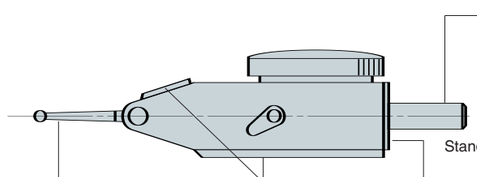


PCD-3

PCD-4



( ) PCD-4



● **Pic test holder**
PTH-1
PTH-2
PTH-0

● **Centricator**
PCD-2

Standard ϕ 6 stem

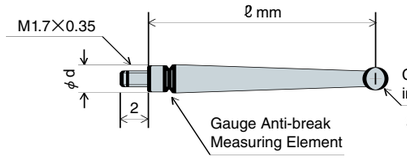
● **Replaceable contact point (carbide ball)**
S ϕ 2.0mm (Standard)
S ϕ 1.0mm
S ϕ 0.8mm
S ϕ 0.5mm
S ϕ 3.0mm
S ϕ 2.0mm (Ruby ball)

● **Dovetail stem**
DS-4 (ϕ4 stem)
DS-6 (ϕ6 stem)
DS-8 (ϕ8 stem)

● **Centricator**
PCD-3
PCD-4

● **Universal holder**
PTH-3 (ϕ6 stem)
PTH-4 (ϕ8 stem)

Replaceable Contact Points (M1.7 × 0.35)



Contact points with 2mm dia, super-hard are attached to all Pic-Test and New Pic-Test indicators. Sϕ3.0, 1.0mm, 0.8mm and 0.5mm dia, contact points are also stock items.

Sϕ2.0 dia, Ruby ball is also available

For Pic Test (Change lever type)

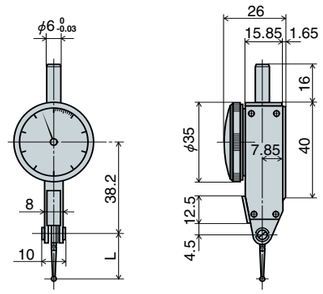
Part No.	ℓ (mm)	ϕ ball (mm)	ϕd (mm)	Applicable Indicator
XP1A-3	18.2	3	2.5	PC-1A PC-1AE PC-3
XP1A-2	18.2	2	2.5	PC-1A PC-1AE PC-3
XP1A-2R (ruby ball)	18.2	2	2.5	PC-1A PC-1AE PC-3
XP1A-1	18.2	1	2.5	PC-1A PC-1AE PC-3
XP1A-08	18.2	0.8	2.5	PC-1A PC-1AE PC-3
XP1A-05	18.2	0.5	2.5	PC-1A PC-1AE PC-3
XP1B-3	19.24	3	2.5	PC-1B PC-1BE PC-1BW
XP1B-2	19.24	2	2.5	PC-1B PC-1BE PC-1BW
XP1B-2R (ruby ball)	19.24	2	2.5	PC-1B PC-1BE PC-1BW
XP1B-1	19.24	1	2.5	PC-1B PC-1BE PC-1BW
XP1B-08	19.24	0.8	2.5	PC-1B PC-1BE PC-1BW
XP1B-05	19.24	0.5	2.5	PC-1B PC-1BE PC-1BW
XP1L-3	39.72	3	3.0	PC-1L PC-1LE PC-3L
XP1L-2	39.72	2	3.0	PC-1L PC-1LE PC-3L
XP1L-2R (ruby ball)	39.72	2	3.0	PC-1L PC-1LE PC-3L
XP1L-1	39.72	1	3.0	PC-1L PC-1LE PC-3L
XP1L-08	39.72	0.8	3.0	PC-1L PC-1LE PC-3L
XP1L-05	39.72	0.5	3.0	PC-1L PC-1LE PC-3L
XP2-3	8.80	3	2.2	PC-2 PC-4
XP2-2	8.80	2	2.2	PC-2 PC-4
XP2-2R (ruby ball)	8.80	2	2.2	PC-2 PC-4
XP2-1	8.80	1	2.2	PC-2 PC-4
XP2-08	8.80	0.8	2.2	PC-2 PC-4
XP2-05	8.80	0.5	2.2	PC-2 PC-4

For New Pic Test (without Change lever type)

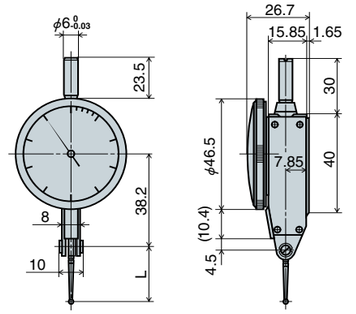
Part No.	ℓ (mm)	ϕ ball (mm)	ϕd (mm)	Applicable Indicator
XN1A-3	17.74	3	2.5	PCN-1A PCN-0 PCN-1AE PCN-1AD PCN-5 PCN-7A
XN1A-2	17.74	2	2.5	PCN-1A PCN-0 PCN-1AE PCN-1AD PCN-5 PCN-7A
XN1A-2R (ruby ball)	17.74	2	2.5	PCN-1A PCN-0 PCN-1AE PCN-1AD PCN-5 PCN-7A PCN-1AU PCN-5U
XN1A-1	17.74	1	2.5	PCN-1A PCN-0 PCN-1AE PCN-1AD PCN-5 PCN-7A
XN1A-08	17.74	0.8	2.5	PCN-1A PCN-0 PCN-1AE PCN-1AD PCN-5 PCN-7A
XN1A-05	17.74	0.5	2.5	PCN-1A PCN-0 PCN-1AE PCN-1AD PCN-5 PCN-7A
XN1B-3	18.63	3	2.5	PCN-1B PCN-1BE PCN-1BZ (A)·(B)
XN1B-2	18.63	2	2.5	PCN-1B PCN-1BE PCN-1BZ (A)·(B)
XN1B-2R (ruby ball)	18.63	2	2.5	PCN-1B PCN-1BE PCN-1BU PCN-1BZ (A)·(B)
XN1B-1	18.63	1	2.5	PCN-1B PCN-1BE PCN-1BZ (A)·(B)
XN1B-08	18.63	0.8	2.5	PCN-1B PCN-1BE PCN-1BZ (A)·(B)
XN1B-05	18.63	0.5	2.5	PCN-1B PCN-1BE PCN-1BZ (A)·(B)
XN1L-3	39.00	3	2.5	PCN-1L PCN-1LE PCN-1LD PCN-1LZ (A)·(B)
XN1L-2	39.00	2	2.5	PCN-1L PCN-1LE PCN-1LD PCN-1LZ (A)·(B)
XN1L-2R (ruby ball)	39.00	2	2.5	PCN-1L PCN-1LE PCN-1LD PCN-1LU PCN-1LZ (A)·(B)
XN1L-1	39.00	1	2.5	PCN-1L PCN-1LE PCN-1LD PCN-1LZ (A)·(B)
XN1L-08	39.00	0.8	2.5	PCN-1L PCN-1LE PCN-1LD PCN-1LZ (A)·(B)
XN1L-05	39.00	0.5	2.5	PCN-1L PCN-1LE PCN-1LD PCN-1LZ (A)·(B)
XN2-3	14.33	3	2.2	PCN-2 PCN-2E PCN-6 PCN-2Z (A)·(B) PK-TEST
XN2-2	14.33	2	2.2	PCN-2 PCN-2E PCN-6 PCN-2Z (A)·(B) PK-SA PK-SB
XN2-2R (ruby ball)	14.33	2	2.2	PCN-2 PCN-2E PCN-6 PCN-2U PCN-6U PCN-2Z (A)·(B) PK-SAR PK-SBR
XN2-1	14.33	1	2.2	PCN-2 PCN-2E PCN-6 PCN-2Z (A)·(B) PK-TEST
XN2-08	14.33	0.8	2.2	PCN-2 PCN-2E PCN-6 PCN-2Z (A)·(B) PK-TEST
XN2-05	14.33	0.5	2.2	PCN-2 PCN-2E PCN-6 PCN-2Z (A)·(B) PK-TEST
XN2B-3	13.00	3	2.2	PCN-2B PCN-2BD PCN-7C PCN-SD
XN2B-2	13.00	2	2.2	PCN-2B PCN-2BD PCN-7C PCN-SD
XN2B-2R (ruby ball)	13.00	2	2.2	PCN-2B PCN-2BD PCN-7C PCN-SD PCN-2BU
XN2B-1	13.00	1	2.2	PCN-2B PCN-2BD PCN-7C PCN-SD
XN2B-08	13.00	0.8	2.2	PCN-2B PCN-2BD PCN-7C PCN-SD
XN2B-05	13.00	0.5	2.2	PCN-2B PCN-2BD PCN-7C PCN-SD
XNS-3	8.13	3	2.2	PCN-S
XNS-2	8.13	2	2.2	PCN-S
XNS-2R (ruby ball)	8.13	2	2.2	PCN-S PCN-SU
XNS-1	8.13	1	2.2	PCN-S
XNS-08	8.13	0.8	2.2	PCN-S
XNS-05	8.13	0.5	2.2	PCN-S

Dimensions of Lever Type Dial Indicators

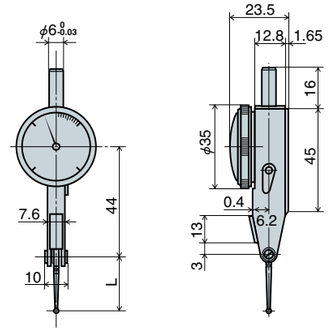
Contact Points Length and Types



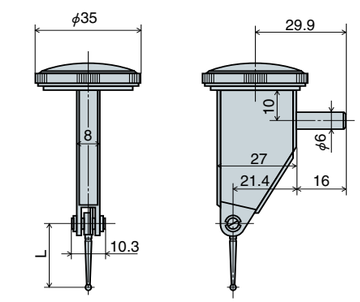
Model	L (mm)
PCN-1A . PCN-1AE . PCN-1AU . PCN-7A	21.3
PCN-1B . PCN-1BE . PCN-1BU . PCN-1BZ(A)(B)	22.2
PCN-1L . PCN-1LE . PCN-1LU . PCN-1LZ(A)(B)	42.8
PCN-2 . PCN-2E . PCN-2U . PCN-2Z(A)(B)	17.94
PCN-2B . PCN-2BU	16.6
PCN-S	11.7
PCN-7C	16.6



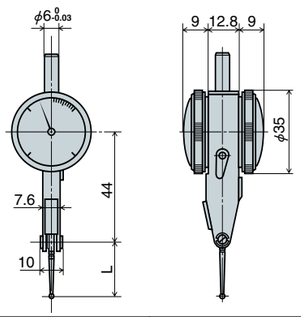
Model	L (mm)
PCN-1AD	21.3
PCN-2BD . PCN-SD	16.6
PCN-1LD	42.8



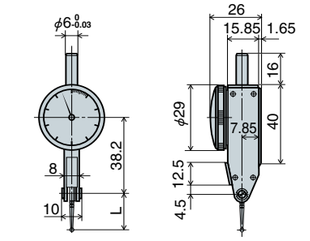
Model	L (mm)
PC-1A . PC-1AE	21.4
PC-1B . PC-1BE	22.4
PC-1L . PC-1LE	43.0
PC-2	12.0



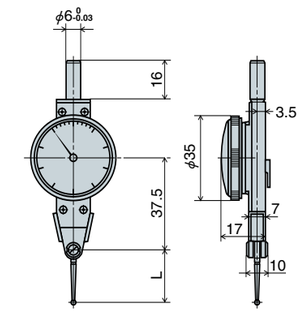
Model	L (mm)
PCN-5 . PCN-5U	21.3
PCN-6 . PCN-6U	17.94



Model	L (mm)
PC-1BW	22.4

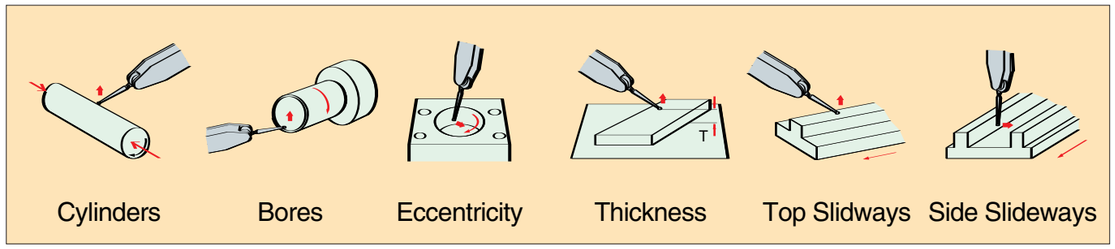


Model	L (mm)
PCN-0	21.3



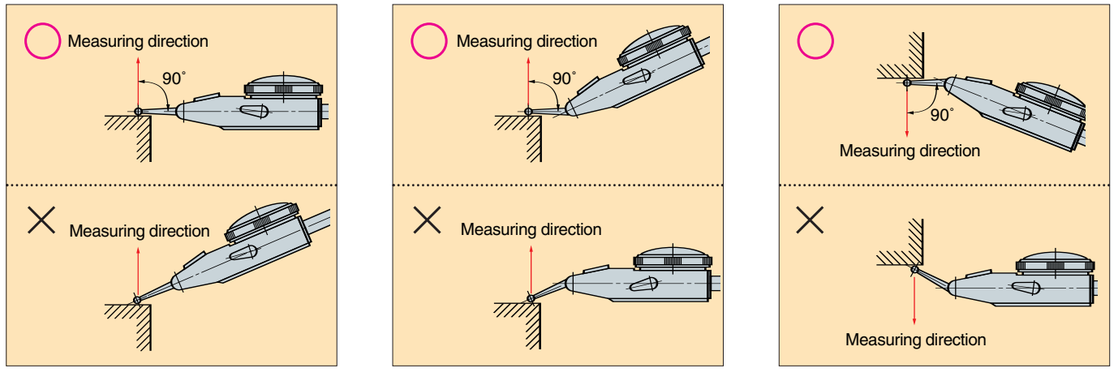
Model	L (mm)
PC-3	21.4
PC-4	12.0
PC-3L	43.0

Applied Examples

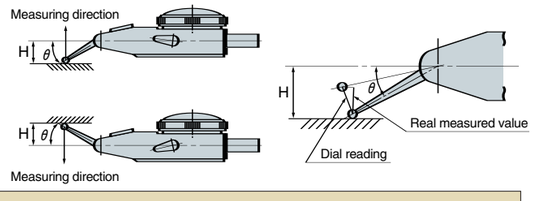


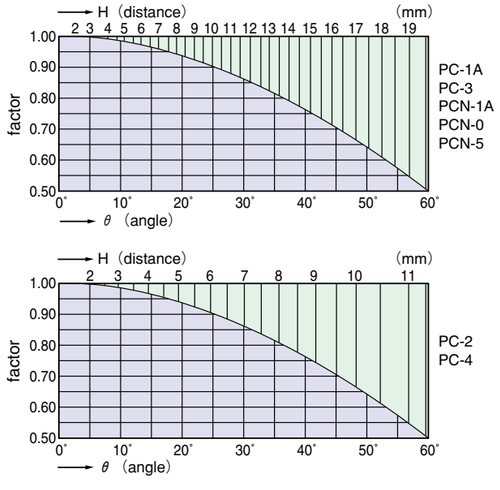
Precautions for Handling

● Dial gauges shall be used by being fixed to a rigid retainer to prevent the influence of flexure or the like.
In measurement, the measuring direction shall be made perpendicular to the center line of the measuring probe.



● **In case they are not perpendicular, a correction by the following formula is necessary:**
Due to various measuring direction, the contact point sometimes can not be angled perpendicular to the measuring device.
Examples the diagrams below, where the measuring prove is set at an non-perpendicular angles and the distance between the pivot of the contact point and the measuring device is signified by the letter H:
Displacement = quantity of pointer movement x COS θ





Example:
Using a PC-1A indicator, suppose the degree of angle is 30˚ and the Pic Test reading is 0.05mm. The factor for the PC-1A indicator from the graph is 0.87.

0.05mm x 0.87 = 0.0435 = 0.043mm

● **When modification is not necessary:**
If the measuring tolerance is 10% and the graph factor is above 0.9, modification by calculation is unnecessary.

Lever type Dial Indicator New

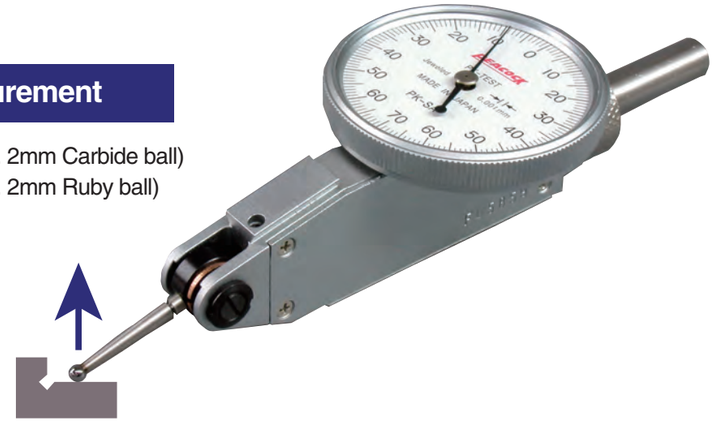
PK-TEST

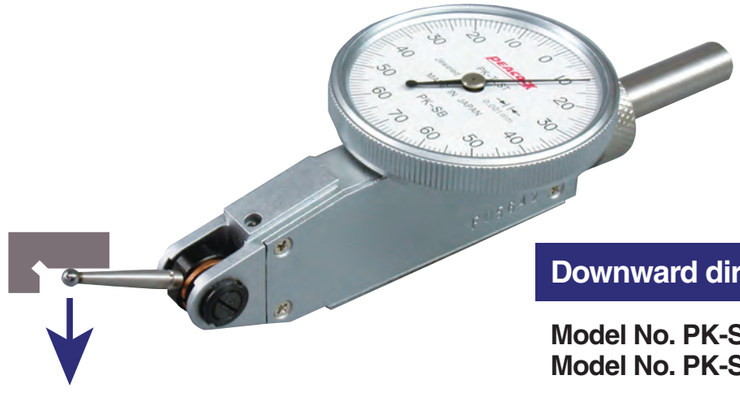
World's first 0.001mm Graduation Lever type Indicator with Long Contact Point (14.18mm).

- It is possible to enable the longer contact point by New Mechanism.
  (Utility Model Resistration No.3206149)
- Longer Contact Point can be reached your measurement work-piece.
- Contact Point is selectable "Carbide ball" or "Ruby ball".

Upward direction measurement

Model No. PK-SA (with dia. 2mm Carbide ball)
Model No. PK-SAR (with dia. 2mm Ruby ball)





Downward direction measurement

Model No. PK-SB (with dia. 2mm Carbide ball)
Model No. PK-SBR (with dia. 2mm Ruby ball)

Specifications

Model	Contact Point	Direction of Measurement	Graduation (mm)	Range (mm)	Wide-range forward accuracy (μm)	10 scale indication error (μm)	Hysteresis (μm)	Repeatability (μm)	Accessory
PK-SA	Carbide	Upward	0.001	0.14	4.0	2.0	3.0	1.0	Dovetail Stem ϕ6mm (DS-6)
PK-SAR	Ruby								
PK-SB	Carbide	Downward							
PK-SBR	Ruby								

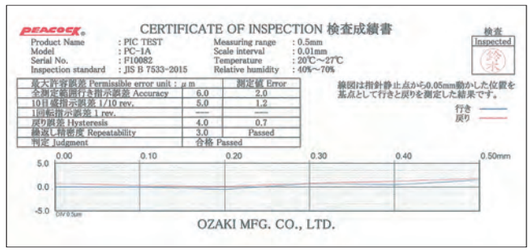
Please purchase PK series after checking the direction of your measurement.
(PK series has no change Lever and no function to change direction automatically.)

Lever type Dial Indicator

PK-TEST

Certificate of Inspection is attached.

We attach Certificate of Inspection at the time of inspection.


CERTIFICATE OF INSPECTION 検査成績書

Product Name	: PIC TEST	Measuring range	: 0.5mm
Model	: PC-1A	Scale interval	: 0.01mm
Serial No.	: P100882	Temperature	: 20℃~27℃
Inspection standard	: JIS B 7533-2015	Relative humidity	: 40%~70%

検査 Inspected

最大許容誤差 Permissible error unit : μm		測定値 Error
全測定範囲内における指示誤差 Accuracy	6.0	2.0
10目盛指示誤差 1/10 rev.	5.0	1.2
1回転指示誤差 1 rev.	----	----
戻り誤差 Hysteresis	4.0	0.7
繰返し精密度 Repeatability	3.0	Passed
判定 Judgment	合格 Passed	

検図は指針静止点から0.05mm動かした位置を基点として行きと戻りを測定した結果です。
行き
戻り

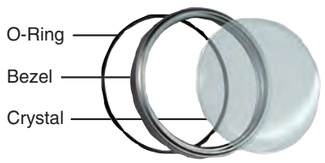
0.00 0.10 0.20 0.30 0.40 0.50mm
5.0 0.0 -5.0

OZAKI MFG. CO., LTD.

Attached Certificate of Inspection cannot be used as Calibration Certificate.
Apply for Calibration Certificate when you Purchase products.

Protect "Crystal" by Bezel made of Metal.

Bezel is made of Metal, it prevents "Crystal" from damage and deformation.
Even if a scratch is generated on Crystal, it is easy to exchange only "Crystal".
There is no aged deterioration on Bezel made of Metal and even if using for a long time. it would be easy to turn Bezel and adjust Zero setting smoothly.

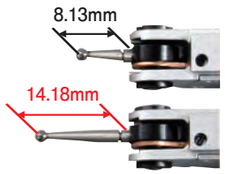


Even if using for long hours, white color of Dial Plate is comfort on the eyes.

Dial Plate based on white color allows an easy view of Pointer and reducing fatigue of the eyes.

Contact Point gets Longer.

PK-TEST enables 6.05mm longer than the conventional 0.001mm Graduation type.

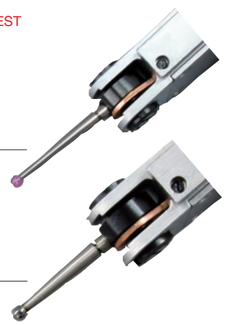


with Ruby ball（Sφ2mm）

PK-SAR・・・Upward direction
PK-SBR・・・Downward direction

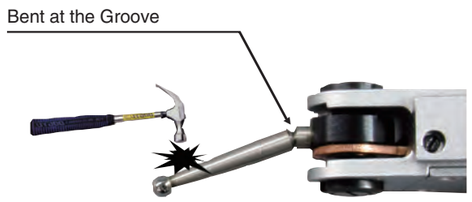
with Carbide ball（Sφ2mm）

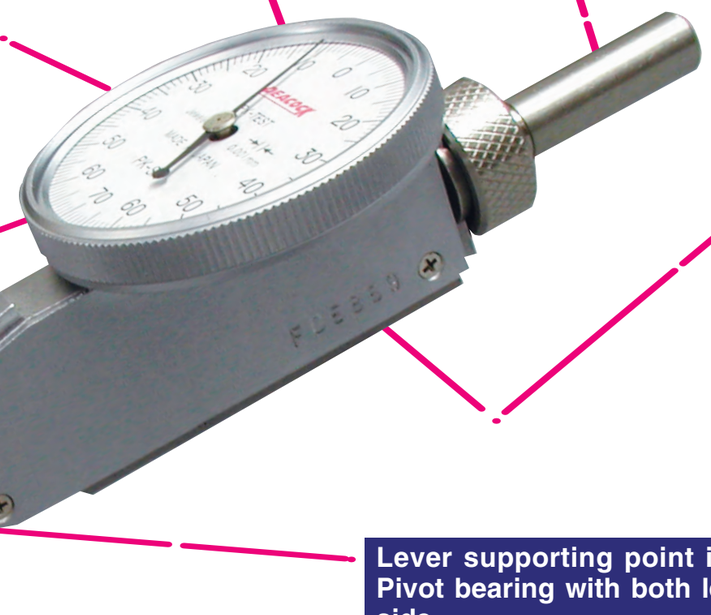
PK-SA・・・Upward direction
PK-SB・・・Downward direction



Contact Point with groove of anti-break.

When a force is applied to Contact Point, it is bent at the groove to protect body and only exchange broken Contact Point. (Apply to all our Pic Test Indicators)



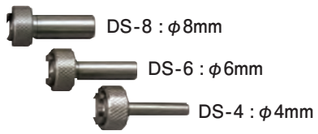


Crystal is formed by press-molding special acrylic plate.

Special acrylic plate is superior to injection molding material in "Oil-proof", "Chemical resistance" and "Transparency" and it is formed by a press work as convex R shape.

Hold by Dovetail Stem.

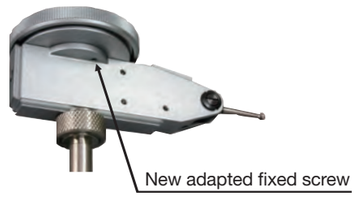
Dovetail Stem can be hold by 3 positions dovetail groove.
(Upper, Lower and Back side positions.)
There are 3 kinds of diameter φ4, φ6 and φ8mm. (PK series is including φ 6mm as standard but you can choose φ4 or φ8mm.)




3 positions dovetail groove.

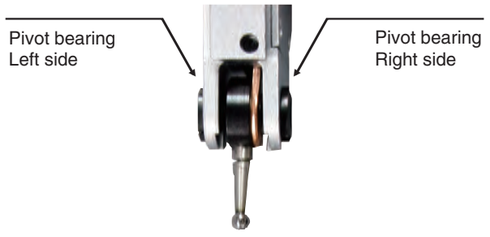
Prevent looseness by 3 points screws.

In PK series, adapt new body and base metal for 3 points fixing screws from 2 points fixing screws,which more strengthens the fixing force.



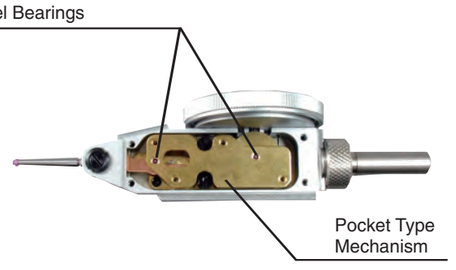
Lever supporting point is used with Pivot bearing with both left and right side

Unique structure using Pivot bearing used with both side of left and right is high reliable and keeps high repeatability even if using for a long time.
(Apply to all Pic Test indicators)



Mechanism with easy maintenance even using for a long time.

It is possible to repair by the same movement method of a clock and keeping durability of bearing due to Jewel.
(Apply to all Pic Test Indicators)

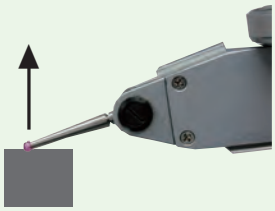


Lever type Dial Indicator

PK-TEST

Upward Measurement

PK-SA
PK-SAR



Contact Point (Carbide)

for PK-SA
for PK-SB

XN2-2

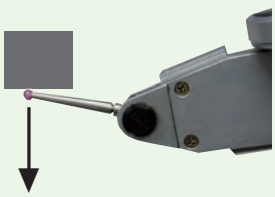
Dovetail Stem

Standard Accessory : DS-6
Option : DS-4 and DS-8

DS-8 : Stem dia. 8mm
DS-6 : Stem dia. 6mm
DS-4 : Stem dia. 4mm

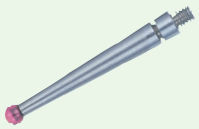
Downward Measurement

PK-SB
PK-SBR



Contact Point (Ruby)

for PK-SAR
for PK-SBR

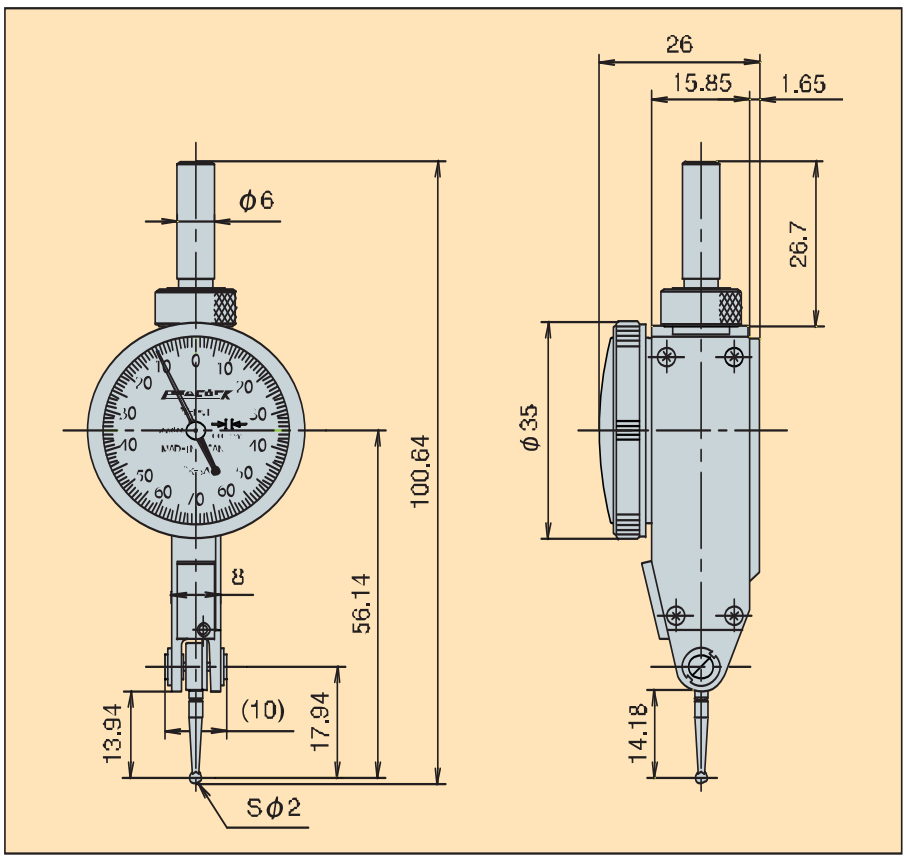


XN2-2R

Mounting Position of Dovetail Stem

3 positions for dovetail Stem

Dimensions



Replaceable Contact Points

XN2-2R
(Ruby ball dia. 2mm)
Standard for
PK-SAR & PK-SBR

XN2-2
(Carbide ball dia. 2mm)
Standard for
PK-SA & PK-SB

XN2-05
(Carbide ball dia. 0.5mm)

XN2-08
(Carbide ball dia. 0.8mm)

XN2-1
(Carbide ball dia. 1.0mm)

XN2-3
(Carbide ball dia. 3mm)

SECTION 3

Cylinder Gauges

- **Standard Cylinder Gauges**
  CC Series
  CG Series
- **Special Cylinder Gauges**
  S Series
- **"R" Series**

Standard Cylinder Gauges

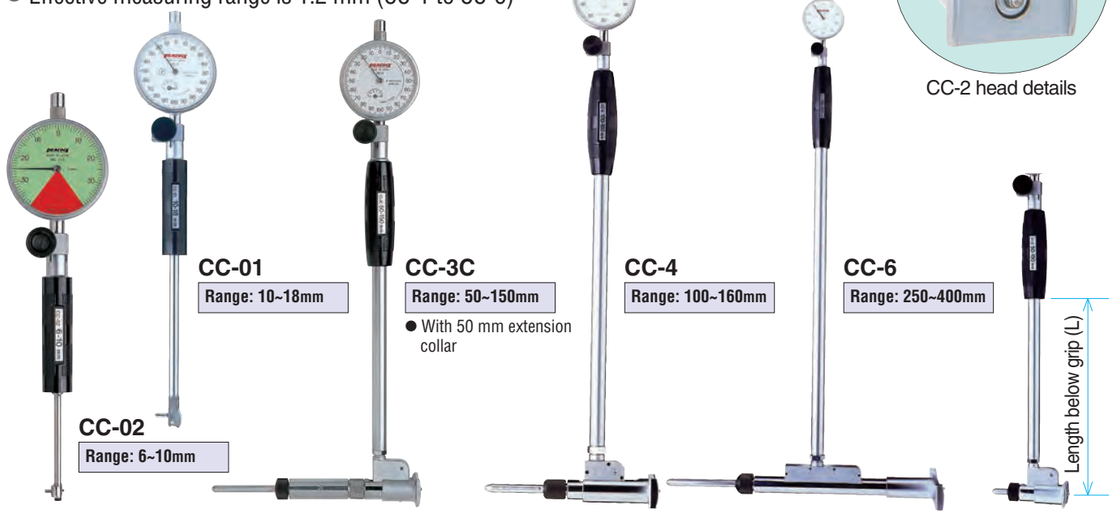
JIS B 7515

CC series

Peacock offers a complete line of Dial Bore Gauges with interchangeable anvils and necessary accessories to perform close tolerance measurements of holes, taper and roundness.

- Dial gauge mounting knob is very simple of and sure avoiding demerit of collet-system.
- The contact point is tungsten carbide ball.
- The standard ball tipped at the replacement rod is made of steel.
  The sintered hard-alloy ball is also available to tip.
- Wide range accuracy·····5 μm or less
  Adjacent error·····2 μm or less
  Repeated accuracy·····2 μm or less
- Effective measuring range is 0.5 mm (CC-02 CC-01)
- Effective measuring range is 1.2 mm (CC-1 to CC-6)

CC-2 head details



Specifications

Model	Range (mm)	Length below grip (mm)	Number of Feelers (mm)	Thickness of Washers (mm)
CC-02	6 ～ 10	50	Intervals 0.5 mm x 9	——
CC-01	10 ～ 18	100	Intervals 1 mm x 9	0.5 mm
CC-1	18 ～ 35	150	Intervals 2 mm x 9	0.5, 1 mm each
CC-2	35 ～ 60	150	Intervals 5 mm x 6	1,2,3 mm each
CC-3	50 ～100	150	Intervals 5 mm x 11	1,2,3 mm each
CC-3C	50 ～150	150	Intervals 5 mm x 11	1,2,3 mm each
CC-4	100～160	250	Intervals 10 mm x 7	1,2,3,4 mm each
CC-5	160～250	250	Intervals 10 mm x 10	1,2,3,4 mm each
CC-6	250～400	400	Intervals 10 mm x 16	1,2,3,4 mm each

※Dial gauge is not furnished and supplied only on request. Suitable dial gauges are 17Z, 57B (0.01mm) and 15Z, 5F (0.001mm).

CC-2 complete set

● List of special length below grip (available on request)

	L=50 (mm)	L=100 (mm)	L=200 (mm)	L=300 (mm)	L=400 (mm)	L=500 (mm)	L=600 (mm)	L=700 (mm)	L=800 (mm)	L=900 (mm)	L=1000 (mm)	L=1500 (mm)	L=2000 (mm)
CC-01	○	standard	○	○	—	—	—	—	—	—	—	—	—
CC-1	CC-1S	○	○	○	○	○	—	—	—	—	—	—	—
CC-2	CC-2S	○	○	○	○	○	○	○	○	○	○	○	○
CC-3	CC-3S	○	○	○	○	○	○	○	○	○	○	○	○
CC-3C	CC-3CS	○	○	○	○	○	○	○	○	○	○	○	○
CC-4	○	○	○	○	○	○	○	○	○	○	○	○	○
CC-5	○	○	○	○	○	○	○	○	○	○	○	○	○
CC-6	○	○	○	○	standard	○	○	○	○	○	○	○	○

○ More than L=600mm for CC-2 can not measure from 35 to 44mm and can measure from 45 to 60mm ID.

Short Size Cylinder Gauges

S series

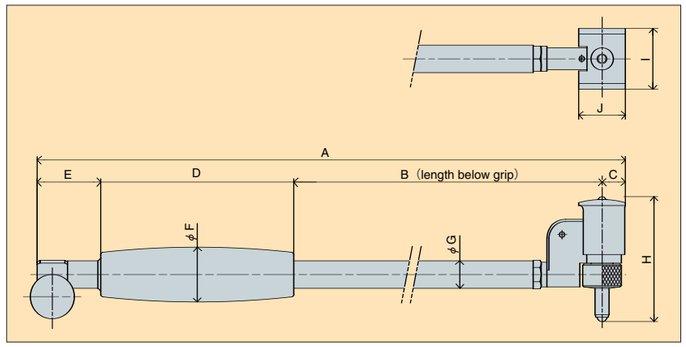
This is a compact cylinder gauge with a length below grip of 50 mm.
It is used when a standard item is too long to measure the object or a shorter length of below grip is required for conveniently.
Specifications are same as standard model.

CC-1S
Range: 18~35mm

CC-2S
Range: 35~60mm

CC-3CS
Range: 50~150mm
● With 50 mm extension collar

Outer Dimension



Dimension

Model	A	B	C	D	E	F	G	H	I	J
CC-1	249	150	5.75	70	23	20	10	18~35	13	11.5
CC-2	251.5	150	8.5	70	23	20	10	35~60	22	17
CC-3	253	150	9	70	23	20	10	50~100	30	18
CC-3C	253	150	9	70	23	20	10	50~150	30	18
CC-4	370	250	12	85	23	25	13	100~160	50	24
CC-5	391.5	251.5	14	100	26	25	16	160~250	70	28
CC-6	540	400	14	100	26	25	16	250~400	100	28
CC-1S	150	50	5.75	70	23	20	10	18~35	13	11.5
CC-2S	151.5	50	8.5	70	23	20	10	35~60	22	17
CC-3S	152	50	9	70	23	20	10	50~100	30	18
CC-3CS	152	50	9	70	23	20	10	50~150	30	18

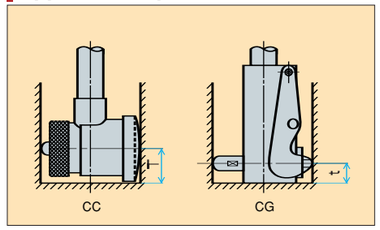
Cylinder Gauges (Blind Hole Type)

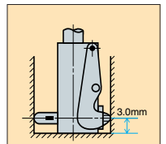
CG series

If using a CC type cylinder gauge for blind hole bore diameter, its guide plate interrupt the measurement at a point deeper than "T", as shown in the figure below.
In such case, the CG type with modified guide plate is suitable for measurement of the diameter to the point as deep as "t".

- Wide range accuracy…5 μm or less
  Adjacent error……2 μm or less
  Repeated accuracy……2 μm or less
- Effective measuring range is 0.5 mm (CG-01)
- Effective measuring range is 1.2 mm (CG-1 to CG-6)

Applied Example





(4.5mm for CG-6)

CG-01
Range: 10~18mm
- Blind hole type

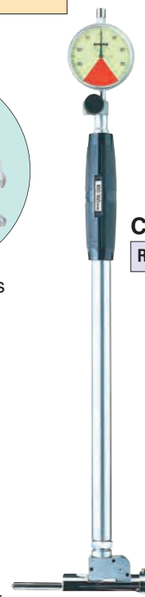
3mm

CG-01:Measuring depth is 5mm in case of measuring from 10 to 11mm. From 12 to 18mm, the measuring depth is 3mm.

CG-1
Range: 18~35mm

CG-3
Range: 50~100mm

CG-3 head details



CG-4
Range: 100~160mm

Specifications

Model	Range (mm)	Length below grip (mm)	Number of Feelers (mm)	Thickness of Washers (mm)
CG-01	10 ～ 18	100	Intervals 1 mm x 9	0.5 mm each
CG-1	18 ～ 35	150	Intervals 2 mm x 9	0.5, 1 mm each
CG-2	35 ～ 60	150	Intervals 5 mm x 6	0.5,1,2,3 mm each
CG-3	50 ～100	150	Intervals 5 mm x 11	0.5,1,2,3 mm each
CG-3C	50 ～150	150	Intervals 5 mm x 11	0.5,1,2,3 mm each
CG-4	100～160	250	Intervals 10 mm x 7	1,2,3,4 mm each
CG-5	160～250	250	Intervals 10 mm x 10	1,2,3,4 mm each
CG-6	250～400	400	Intervals 10 mm x 16	1,2,3,4 mm each

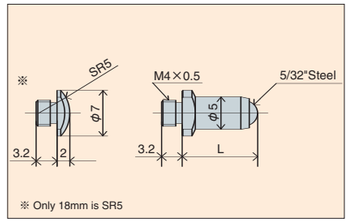
※ Dial gauge is not furnished and supplied only on request. Suitable dial gauges are 17Z, 57B (0.01mm) and 15Z, 5F (0.001mm).
※ CG-3C includes 50 mm extension collar.
※ In general, it is the range from the origin, that is the position where the plunger is pushed in by 0.1 mm, to the position where the plunger is pushed in further by 1.2 mm.

● List of special length below grip (available on request)

	L=50 (mm)	L=100 (mm)	L=150 (mm)	L=200 (mm)	L=250 (mm)	L=300 (mm)	L=400 (mm)	L=500 (mm)	L=600 (mm)	L=700 (mm)	L=800 (mm)	L=900 (mm)	L=1000 (mm)
CG-01	○	standard	○	○	○	○							
CG-1	○	○	standard	○	○	○	○	○					
CG-2	○	○	standard	○	○	○	○	○	○	○	○	○	○
CG-3	○	○	standard	○	○	○	○	○	○	○	○	○	○
CG-3C	○	○	standard	○	○	○	○	○	○	○	○	○	○
CG-4	○	○	○	○	standard	○	○	○	○	○	○	○	○
CG-5	○	○	○	○	standard	○	○	○	○	○	○	○	○
CG-6	○	○	○	○	○	○	standard	○	○	○	○	○	○

Dimensions for Feeler and Washer for Cylinder Gauges

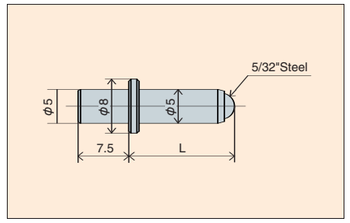
CC-1 Feeler



※ Only 18mm is SR5

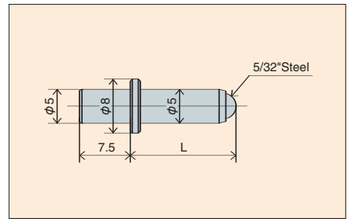
Model	Size (mm)	L (mm)
CC-1 Feeler	※18	2
	20	4
	22	6
	24	8
	26	10
	28	12
	30	14
	32	16
	34	18

CC-2 Feeler



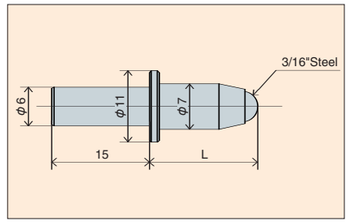
Model	Size (mm)	L (mm)
CC-2 Feeler	35	5
	40	10
	45	15
	50	20
	55	25
	60	30

CC-3·3C Feeler



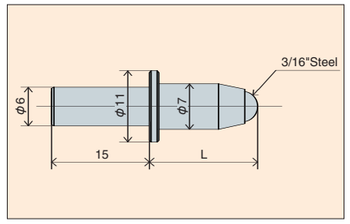
Model	Size (mm)	L (mm)
CC-3·3C Feeler	50	5
	55	10
	60	15
	65	20
	70	25
	75	30
	80	35
	85	40
	90	45
	95	50
	100	55

CC-4 Feeler



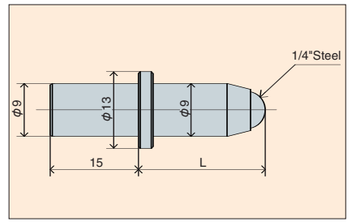
Model	Size (mm)	L (mm)
CC-4 Feeler	100	10
	110	20
	120	30
	130	40
	140	50
	150	60
	160	70

CC-5 Feeler



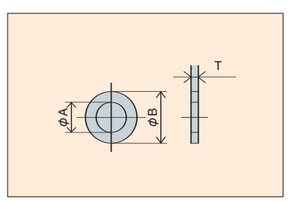
Model	Size (mm)	L (mm)
CC-5 Feeler	160	10
	170	20
	180	30
	190	40
	200	50
	210	60
	220	70
	230	80
	240	90
	250	100

CC-6 Feeler



Model	Size (mm)	L (mm)
CC-6 Feeler	250	10
	260	20
	270	30
	280	40
	290	50
	300	60
	310	70
	320	80
	330	90
	340	100
	350	110
	360	120
	370	130
	380	140
	390	150
	400	160

CC-1～6 Washer



Model	T (mm)	A (mm)	B (mm)
CC-1	0.5, 1	4.1	7
CC-2	1, 2, 3	5.1	8
CC-3·3C	1, 2, 3	5.1	8
CC-4	1, 2, 3, 4	6.1	10
CC-5	1, 2, 3, 4	6.1	10
CC-6	1, 2, 3, 4	9.1	13

Cylinder Gauges

CC•CG-R series

Do you have any trouble when measuring internal diameter?
If so,we offer more radii of Contact Point & Feeler for Cylinder Gauges "R" Series.

- Wide range accuracy…5 μm or less
  Adjacent error……2 μm or less
  Repeated accuracy……2 μm or less

CC-1R

CC-3R

Specifications for CC-"R" series

Model	Range	Length below grip	Number of feelers	Thickness of washers	Extension collar
CC-01R	10～ 18mm	100mm	Intervals 0.5mm× 9	0.5mm	—
CC-1R	18～ 35mm	150mm	Intervals 2mm× 9	0.5, 1mm each	—
CC-2R	35～ 60mm	150mm	Intervals 5mm× 6	1, 2, 3mm each	—
CC-3R	50～100mm	150mm	Intervals 5mm×11	1, 2, 3mm each	—
CC-3CR	50～150mm	150mm	Intervals 5mm×11	1, 2, 3mm each	50mm

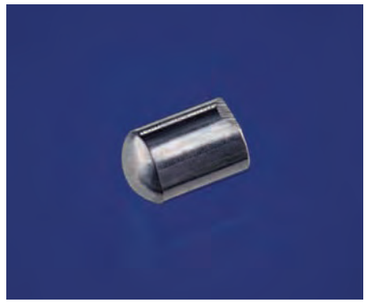
Specifications for CG-"R" series

Model	Range	Length below grip	Number of feelers	Thickness of washers	Extension collar
CG-01R	10～ 18mm	100mm	Intervals 0.5mm× 9	0.5mm	—
CG-1R	18～ 35mm	150mm	Intervals 2mm× 9	0.5, 1mm each	—
CG-2R	35～ 60mm	150mm	Intervals 5mm× 6	0.5, 1, 2, 3mm each	—
CG-3R	50～100mm	150mm	Intervals 5mm×11	0.5, 1, 2, 3mm each	—
CG-3CR	50～150mm	150mm	Intervals 5mm×11	0.5, 1, 2, 3mm each	50mm

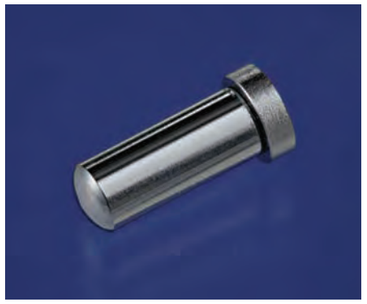
Note: CG-01, in case 10~11mm measurement, the measuring depth is 5mm but 11~18mm is 3mm measuring depth.

Contact Point Hv700±50 (Tip heat treatment and hardened)

CC-01R
CG-01R



CC-1R · CG-1R · CG-2R
CG-3R · CG-3CR



CC-2R · CC-3R
CC-3CR

Feeler Hv700±50 (Tip heat treatment and hardened)

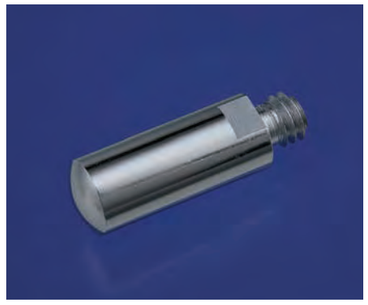
CC-01R
CG-01R

CC-1R

CC-2R · CC-3R
CC-3CR

Feeler Hv700±50 (Tip heat treatment and hardened)

CG-1R



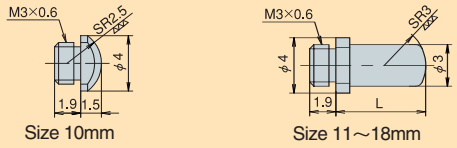
CG-2R · CG-3R
CG-3CR

"R" Series Cylinder Gauges can be made Special Production as following:

1. Long Size of Length below grip Cylinder Gauge
2. Short Size of Length below grip Cylinder Gauge
3. Short Size of the overall length Cylinder Ggauge
4. L-shaped Cylinder Gauge

Dimensions for Feeler and Washer for R series Cylinder Gauges:

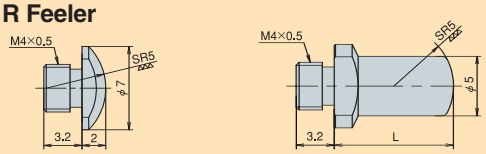
CC-01R Feeler



Size 10mm　　Size 11～18mm

Size (mm)	L (mm)	Size (mm)	L (mm)
10	1.5	15	6.5
11	2.5	16	7.5
12	3.5	17	8.5
13	4.5	18	9.5
14	5.5		

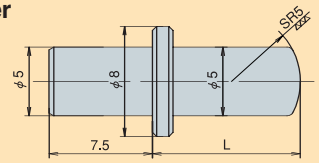
CC-1R Feeler



Size 18mm　　Size 20～34mm

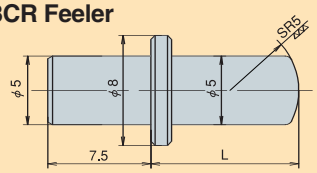
Size (mm)	L (mm)	Size (mm)	L (mm)
18	2	28	12
20	4	30	14
22	6	32	16
24	8	34	18
26	10		

CC-2R Feeler



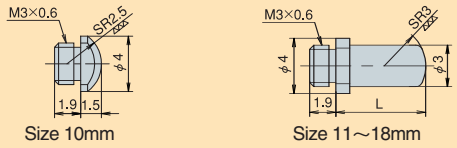
Size (mm)	L (mm)	Size (mm)	L (mm)
35	5	50	20
40	10	55	25
45	15	60	30

CC-3R・CC-3CR Feeler



Size (mm)	L (mm)	Size (mm)	L (mm)
50	5	80	35
55	10	85	40
60	15	90	45
65	20	95	50
70	25	100	55
75	30		

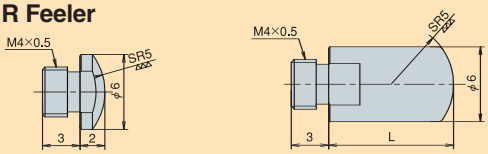
CG-01R Feeler



Size 10mm　　Size 11～18mm

Size (mm)	L (mm)	Size (mm)	L (mm)
10	1.5	15	6.5
11	2.5	16	7.5
12	3.5	17	8.5
13	4.5	18	9.5
14	5.5		

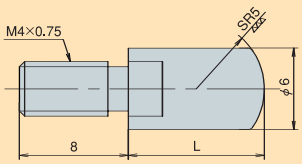
CG-1R Feeler



Size 18mm　　Size 20～34mm

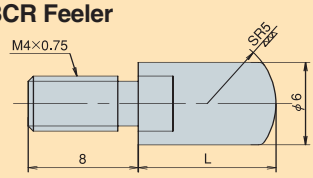
Size (mm)	L (mm)	Size (mm)	L (mm)
18	2	28	12
20	4	30	14
22	6	32	16
24	8	34	18
26	10		

CG-2R Feeler



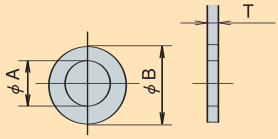
Size (mm)	L (mm)	Size (mm)	L (mm)
35	5	50	20
40	10	55	25
45	15	60	30

CG-3R・CG-3CR Feeler



Size (mm)	L (mm)	Size (mm)	L (mm)
50	5	80	35
55	10	85	40
60	15	90	45
65	20	95	50
70	25	100	55
75	30		

R type Washer



Model	T	A	B
CC01-R	0.5	3.1	4.5
CC-1R	0.5・1	4.1	7
CC-2R	1・2・3	5.1	8
CC-3R・CC-3CR	1・2・3	5.1	8
CG01-R	0.5	3.1	4.5
CG-1R	0.5・1	4.1	5
CG-2R	0.5・1・2・3	4.1	6
CG-3R・CG-3CR	0.5・1・2・3	4.1	6

SECTION

4

Inch Scale Dial Indicators

- Dial Gages
- Dial Gages (Metric)
- Pic Test Indicators
- Dial Bore Gage Sets
- Dial Thickness Gage

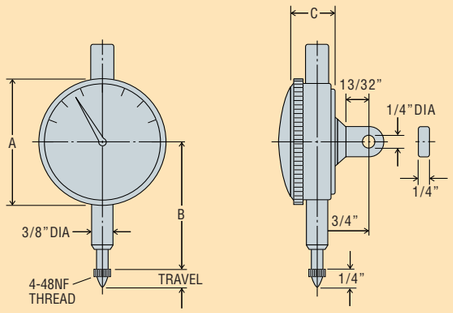
Dial Gages

0.001″

- Easy-reading distinct graduations.
- Inch models have standard black needles and white dial faces or new high visibility orange needles and black faces. Metric models have yellow dial faces. (see page 76)
- Hard, satin-chrome finish.
- Superior quality of spindle rack, pinions and gear trains ensure longevity.
- Meets or exceeds applicable US federal specifications.
- Conforms to AGD specifications.

1200
Graduation: 0.001″
Range: 0.2″
● Lug back

Dimensions



	A	B	C
AGD 1	1-37/64″	1-5/8″	11/16″
AGD 2	2-3/64″	2″	25/32″

1330
Graduation: 0.001″
Range: 1.0″
● Lug back

1330B
Graduation: 0.001″
Range: 1.0″
● Lug back

1310
Graduation: 0.001″
Range: 0.50″
● Lug back

1310B
Graduation: 0.001″
Range: 0.50″
● Lug back

0.001″

1364
Graduation: 0.001″
Range: 2.0″
● Lug back

1364B
Graduation: 0.001″
Range: 2.0″
● Lug back

0.0001″

1440
Graduation: 0.0001″
Range: 0.05″
● Lug back

1440B
Graduation: 0.0001″
Range: 0.05″
● Lug back

1460
Graduation: 0.0001″
Range: 0.05″
● Flat back

1460B
Graduation: 0.0001″
Range: 0.05″
● Flat back

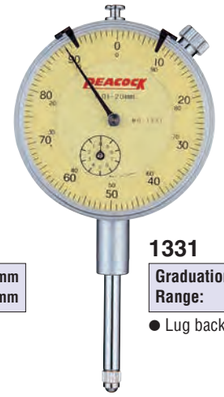
Specifications

White face Model No.	Black face Model No.	Measuring range	Graduation	Reading	Wide range forward accuracy	Retrace error	Measuring force (less than)	Back Config.	AGD
1200	—	.20"	.001"	±0-50-100	.0008"	.0003"	1.4N	**Lug**	1
1330	**1330B**	1.0"	.001"	±0-50-100	.002"	.0004"	2.0N	**Lug**	2
1310	**1310B**	.50"	.001"	±0-50-100	.001"	.0003"	1.8N	**Lug**	2
1364	**1364B**	2.0"	.001"	±0-50-100	.004"	.0004"	2.5N	**Lug**	2
1440	**1440B**	.05"	.0001"	±0-5-10	.0003"	.0002"	1.5N	**Lug**	2
1460	**1460B**	.05"	.0001"	0-5-0	.0003"	.0002"	1.5N	**Flat**	2

Metric Graduations 0.01mm

1201
Graduation: 0.01mm
Range: 2.0mm
● Lug back

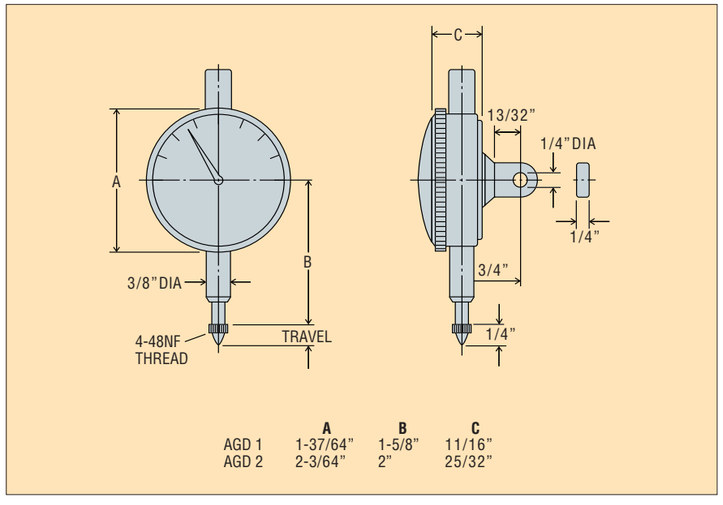
1311
Graduation: 0.01mm
Range: 10.0mm
● Lug back



1331
Graduation: 0.01mm
Range: 20.0mm
● Lug back

1361
Graduation: 0.01mm
Range: 50.0mm
● Lug back

Dimensions



	A	B	C
AGD 1	1-37/64"	1-5/8"	11/16"
AGD 2	2-3/64"	2"	25/32"

Specifications

Model No.	Measuring range	Graduation	Reading	Wide range forward accuracy	Retrace error	Measuring force (less than)	Back Config.	AGD
1201	4.0mm	0.01mm	±0-50-100	12 μm	3 μm	1.4N	**Lug**	1
1311	10.0mm	0.01mm	±0-50-100	15 μm	3 μm	1.4N	**Lug**	2
1331	20.0mm	0.01mm	±0-50-100	25 μm	4 μm	2.2N	**Lug**	2
1361	50.0mm	0.01mm	±0-50-100	50 μm	5 μm	2.5N	**Lug**	2

Pic Test Indicators

- Auto-reversing.
- Comes complete with .038", .078", .125" dia hardchromed contact points, Clamping bars, wrench and three stems: 3/8", 1/4" and 5/32".
- 180° swing on point and shaft.
- Fully jeweled movements.
- White face models have black needles, numbers and graduations. Black face models have bright, flourescent orange needles with white numbers and graduations.
- Dial diameter is 1-3/8".
- Universal positioning capability.
- Dovetoils on top, back & front.
- Excellent rigid
- Non-magnetic

Horizontal Type

2000
Graduation: 0.0005"
Range: 0.030"

2000B
Graduation: 0.0005"
Range: 0.030"

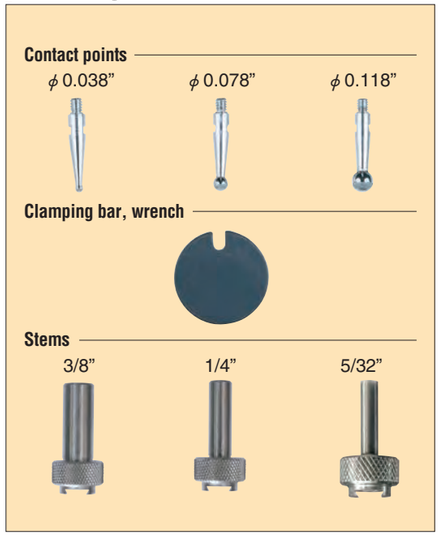
2010
Graduation: 0.0001"
Range: 0.008"

2010B
Graduation: 0.0001"
Range: 0.008"

2030
Graduation: 0.0005"
Range: 0.040"

2030B
Graduation: 0.0005"
Range: 0.040"

Set Configurations



Specifications

White face Model No.	Black face Model No.	Measuring range	Graduation	Reading	Wide range forward accuracy	Backward error	Measuring force (less than)	Contact point length
2000	**2000B**	.030"	.0005"	0-15-0	.0005"	.0003"	0.3N	.750"
2010	**2010B**	.008"	.0001"	0-4-0	.0003"	.0002"	0.3N	.375"
2030	**2030B**	.040"	.0005"	0-20-0	.0010"	.0003"	0.3N	1.750"

Vertical Type

2050
Graduation: 0.0005”
Range: 0.030”

2050B
Graduation: 0.0005”
Range: 0.030”

2060
Graduation: 0.0001”
Range: 0.008”

2060B
Graduation: 0.0001”
Range: 0.008”

Large Size Dial Face Type

The dial plate size of 2200, 2200B, 2210, and 2210B models has been enlarged, with easy reading due to the lager scale spacing, as a result.

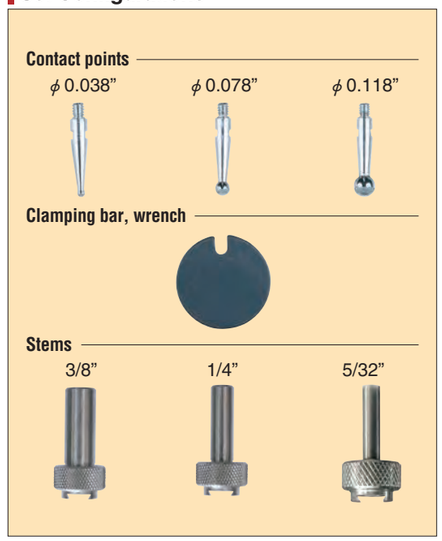
2200
Graduation: 0.0005”
Range: 0.030”

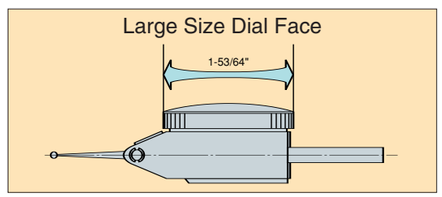
2200B
Graduation: 0.0005”
Range: 0.030”

2210
Graduation: 0.0001”
Range: 0.008”

2210B
Graduation: 0.0001”
Range: 0.008”

Set Configurations





Specifications

White face Model No.	Black face Model No.	Measuring range	Graduation	Reading	Wide range forward accuracy	Backward error	Measuring force (less than)	Contact point length
2050	**2050B**	.030"	.0005"	0-15-0	.0005"	.0003"	0.3N	.750"
2060	**2060B**	.008"	.0001"	0-4-0	.0003"	.0002"	0.3N	.375"
2200	**2200B**	.030"	.0005"	0-15-0	.0005"	.0003"	0.3N	.750"
2210	**2210B**	.008"	.0001"	0-4-0	.0003"	.0002"	0.3N	.375"

Dial Bore Gage Sets

- Each set includes a high quality ADG2 Dial indicator with .0001” graduations. High precision, combined with ultra smooth movement, makes this the set for the most demanding users.
- Set comes complete with protective cover and fitted case.
- For close tolerance measurements of hole sizes, ID taper dimensions and roundness.
- Each set includes a reference chart, clearly specifying Spacer and Feeler sizes, for each measurement range.

5710
Range: 0.25-0.4”

5730B
Range: 0.37-0.75”

5740
Range: 0.75-1.50”

5790B
Range: 6.0-10.0”

5730 complete set

Specifications

White face Model No.	Black face Model No.	Range	Wide range accuracy	Adjacent error	Repeated error	Length below Grip	Number of Feeler	Number of Spacer
5710	**5710B**	.250-.400"	.0002"	.00008"	.00008"	1-31/32"	8	—
5730	**5730B**	.370-.750"	.0002"	.00008"	.00008"	3-15/16"	10	1
5740	**5740B**	.750-1.50"	.0002"	.00008"	.00008"	5-29/32"	8	2
5750	**5750B**	1.50-2.50"	.0002"	.00008"	.00008"	5-29/32"	6	2
5770	**5770B**	2.00-6.00"	.0002"	.00008"	.00008"	5-29/32"	11	2
5790	**5790B**	6.00-10.0"	.0002"	.00008"	.00008"	9-29/32"	9	4

Dial Thickness Gage

- Designed for quick and accurate measurement of small parts, sheet metal, paper, fabric, etc.
- Convenient, one-handed operation.
- Preloaded spindle for consistent measuring pressure.
- Adjustable zero setting with bezel.
- Baked enamel finish.
- Distinct, fine graduations for easy reading.
- Spindle made of hardened steel.

4600

Graduation: 0.001”
Range: 0.5”

Specifications

Model No	Range	Graduation	Throat depth	Accuracy	Measuring force (less than)
4600	.50"	.001"	.78"	.0010"	1.8N

● For measuring thickness of paper

SECTION

5

Gauge Testers

- NB
- CCT-2

Gauge Tester

(Dial Indicator Testing Equipment)

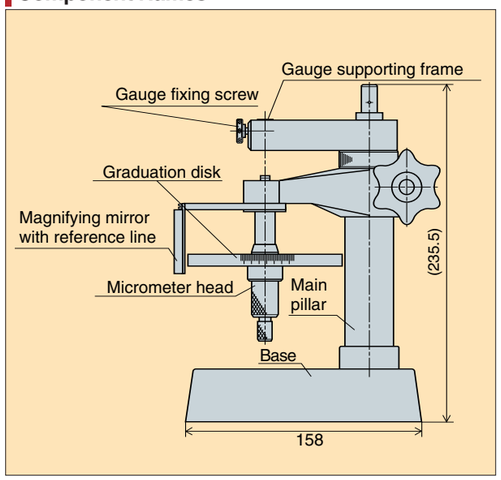
Dial Gauge Tester Model NB

- This is a calibration tester having a high precision micrometer with the minimum scale of 1 μm. It can be used in order to calibrate dial gauges as well as other displacement gauges.
- The stancion is vertically adjustable according to the type of gauges and reading is done while looking at the scale plate and the cursor line.

● Lever-type dial gauge

● Back plunger type dial gauge

Component Names



Specifications

Model	Micrometer head		Forward Accuracy (μm)	Feed per revolution (mm)	Spindle tip	Gauge fixing dimension (mm)
	Graduation (mm)	Measurement Range (mm)				
NB	0.001(1 μm)	20	under ±1	0.5／rev.	Carbide chip	8mm dia. 10mm dia.

Gauge Tester

(Cylinder Gauge Testing Equipment)

Cylinder Gauge Tester Model CCT-2

- This is a calibration tester used exclusively for cylinder gauges having a high precision micrometer with the minimum scale of 1 μm.
- An outer cylinder is held erectly so that deflection may not affect the measurements and a center rod for pressing is provided on the moving bed in order to prevent from errors due to the difference of measuring force.

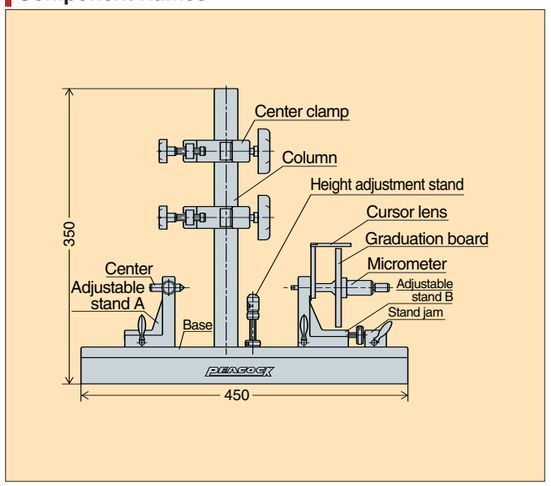
●Inspection of dial gauges is also possible.

Cylinder gauges to be possibly inspected

- All the cylinder gauges of JIS B 7515 Standards
- All the CC and CG models of "PEACOCK"

ϕ6～10mm	ϕ18～35mm	ϕ50～100mm	ϕ160～250mm
ϕ10～18mm	ϕ35～60mm	ϕ100～160mm	ϕ250～400mm

Component Names



Specifications

Model	Micrometer head		Forward Accuracy (μm)	Feed per revolution (mm)	Spindle tip
	Graduation (mm)	Measurement Range (mm)			
CCT-2	0.001	20	under ±1	0.5／rev.	Carbide chip

MEMO

SECTION

6

Thickness Gauges

- Dial Thickness Gauges (0.01mm, 0.001mm)
- Dial Swift Gauge
- Paper Thickness Gauge
- Dial Thickness Gauges (Large Type) (0.01mm, 0.05mm)
- Dial Thickness Gauge (Roller Type)
- Dial Sheet Gauges (0.01mm, 0.05mm)
- Dial Pipe Gauges
- Dial Lens Gauge
- Dial Upright Gauges
- Constant Pressure Thickness Gauge

Dial Thickness Gauges

0.01mm type

These thickness gauges are especially handy for measuring thickness of small parts, metal, rubber, vinyl, paper, foil and other sheet material.

- The objects to be measured is clamped by simple lever operation. The measured values are read directly on the dial gauge.
- Since the anvil and the contact point are adjusted for parallelism, accurate measured values are obtained.

G

Graduation: 0.01mm
Range: 0~10mm

- ϕ 10mm flat contact point and anvil (Ceramic)

G-0.4N

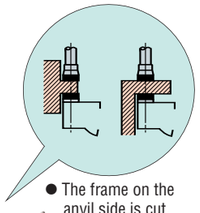
Graduation: 0.01mm
Range: 0~10mm

- Measuring force initial pressure 0.4N

G-2.4N

Graduation: 0.01mm
Range: 0~10mm

- Measuring force final pressure 2.4N



- The frame on the anvil side is cut, which to be flush contact point, anvil and frame.

G-20

Graduation: 0.01mm
Range: 0~10mm

- ϕ 20mm flat contact point and anvil (Metal)

G-30

Graduation: 0.01mm
Range: 0~10mm

- ϕ 30mm flat contact point and anvil (Metal)

G-1A

Graduation: 0.01mm
Range: 0~10mm

- ϕ 5mm flat contact point and anvil (Metal)

G-1M

Graduation: 0.01mm
Range: 0~10mm

- ϕ 6mm flat contact point and anvil (Ceramic)

G-2

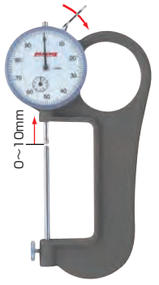
Graduation: 0.01mm
Range: 0~20mm

- ϕ 10mm flat contact point and anvil (Ceramic)

G-3

Graduation: 0.01mm
Range: 30mm

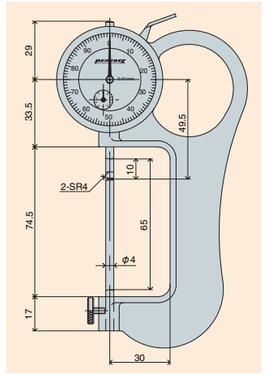
- ϕ 10mm flat contact point and anvil (Ceramic)
- Anvil side is adjustable
- More than 10mm range is comparative measurement.

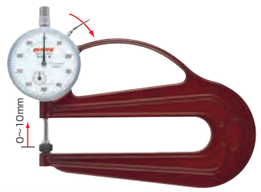


G-4

Graduation: 0.01mm
Range: 65mm

- Spherical contact point
- Anvil side is adjustable
- More than 10mm range is comparative measurement.





H

Graduation: 0.01mm
Range: 0~10mm

- ϕ 10mm flat contact point and anvil (Ceramic)

H-0.4N

Graduation: 0.01mm
Range: 0~10mm

- Measuring force inital pressure 0.4N

H-2.4N

Graduation: 0.01mm
Range: 0~10mm

- Measuring force final pressure 2.4N

H-20

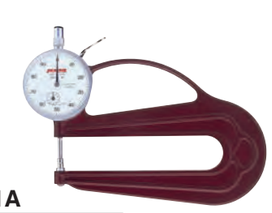
Graduation: 0.01mm
Range: 0~10mm

- ϕ 20mm flat contact point and anvil (Metal)

H-30

Graduation: 0.01mm
Range: 0~10mm

- ϕ 30mm flat contact point and anvil (Metal)

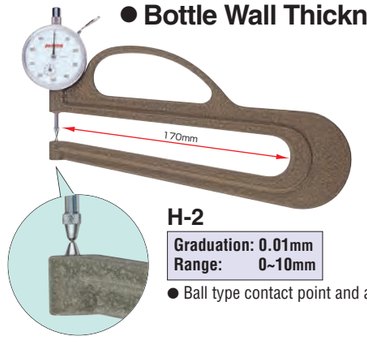


H-1A

Graduation: 0.01mm
Range: 0~10mm

- ϕ 5mm flat contact point and anvil (Metal)

● Bottle Wall Thickness Gauge

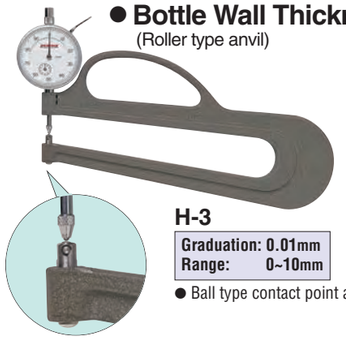


H-2

Graduation: 0.01mm
Range: 0~10mm

- Ball type contact point and anvil

● Bottle Wall Thickness Gauge
(Roller type anvil)



H-3

Graduation: 0.01mm
Range: 0~10mm

- Ball type contact point and roller type anvil

Specifications

Model	Graduation (mm)	Range (mm)	Throat depth (mm)	Accuracy (μm)	Contact Point		Measuring force less than(N)
					Dia (mm)	Parallelism (μm)	
G	0.01	0~10	20	±20	10	5	1.8
G-0.4N	0.01	0~10	20	±20	10	5	Initial pressure 0.4N
G-2.4N	0.01	0~10	20	±20	10	5	Final pressure 2.4N
G-MT	0.01	0~10	20	±20	10(Metal)	5	1.8
G-1A	0.01	0~10	20	±20	5	5	1.8
G-1M	0.01	0~10	20	±20	6	5	1.8
G-2	0.01	0~20	33	±22	10	5	2.0
※ **G-3**	0.01	30	20	±20	10	5	1.8
※ **G-4**	0.01	65	30	±20	Spherical	—	1.8
G-20	0.01	0~10	20	±20	20(Metal)	15	1.8
G-30	0.01	0~10	20	±20	30(Metal)	20	1.8
H	0.01	0~10	120	±20	10	5	1.8
H-0.4N	0.01	0~10	120	±20	10	5	Initial pressure 0.4N
H-2.4N	0.01	0~10	120	±20	10	5	Final pressure 2.4N
H-MT	0.01	0~10	120	±20	10(Metal)	5	1.8
H-1A	0.01	0~10	120	±20	5	5	1.8
H-2	0.01	0~10	170	±20	Ball type	—	1.8
H-3	0.01	0~10	170	±20	Ball type	—	1.8
H-20	0.01	0~10	120	±20	20(Metal)	15	1.8
H-30	0.01	0~10	120	±20	30(Metal)	20	1.8

※ G-3/G-4 : Measuring range of dial gauge is 10mm.

Dial Thickness Gauges

0.001mm type PAT. No. 3052674

- New thinkness gauges with 0.001mm graduations.
- Newly developed special frame minimizes inspecting errors resulting from thermal changes. Zero reference point will remain accurate even after many hours of use or extreme swings in temperature.

G-6C

Graduation: 0.001mm
Range: 0~1mm

- ϕ 5mm flat contact point and anvil (Metal)

G-7C

Graduation: 0.001mm
Range: 0~5mm

- ϕ 5mm flat contact point and anvil (Metal)

Specifications

Model	Graduation (mm)	Range (mm)	Throat depth (mm)	Accuracy (μm)	Contact Point		Measuring force less than (N)
					Dia (mm)	Parallelism (μm)	
G-6C	0.001	0~1	20	±5	5	3	1.8
G-7C	0.001	0~5	20	±10	5	3	1.8

Dial Swift Gauge

The dial swift gauge is used for the same purpose as an ordinary micrometer to measure outside sizes.

- The spindle is always pulled upward by the force of the spring. The knob at the top of the gauge is pushed down by finger to clamp an object in measurement.
- It will show its power for measurement of thickness, heights and diameters.

Q-1

Graduation: 0.05mm
Range: 0~25mm

Specifications

Model	Graduation (mm)	Range (mm)	Throat depth (mm)	Accuracy (μm)	Contact Point	
					Dia (mm)	Parallelism (μm)
Q-1	0.05	0~25	30	±100	5.5	10

Paper Thickness Gauge

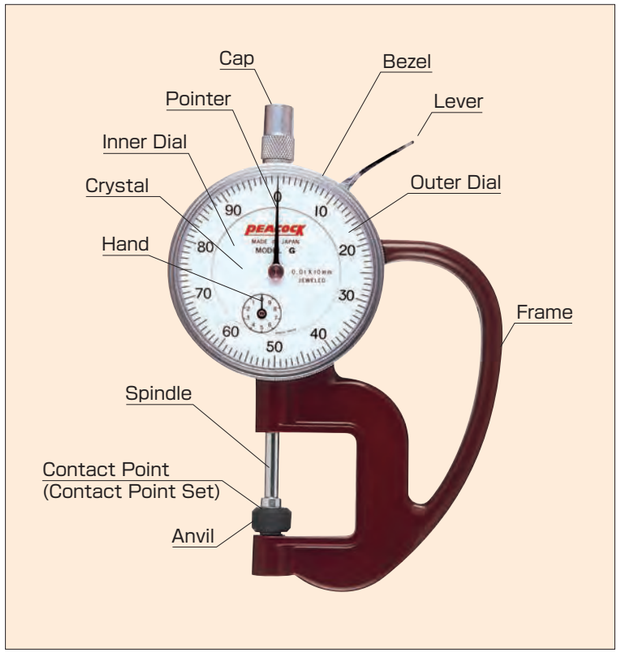
- μm unit on the dial Plate suitable for paper thickness measurement.

PG-10

Graduation: 0.01mm
Range: 0~10mm

- Throat Depth 20mm
- Accuracy ±20μm
- Contact Point dia. 10mm
- Parallelism 5μm
- Measuring force less than 1.8N

Name of each Parts

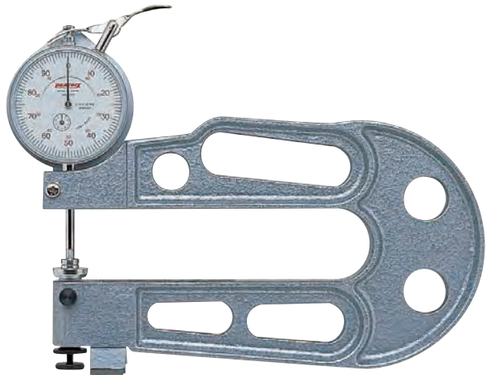


How to adjust setting 0 of Pointer.

- Normally, Pointer and Hand without inserting a work-piece point to 0. There is a possibility the Pointer is not on 0 position due to temperature fluctuation. In this case, set Pointer to 0 by rotating the Bezel.

Dial Thickness Gauges (Large type)

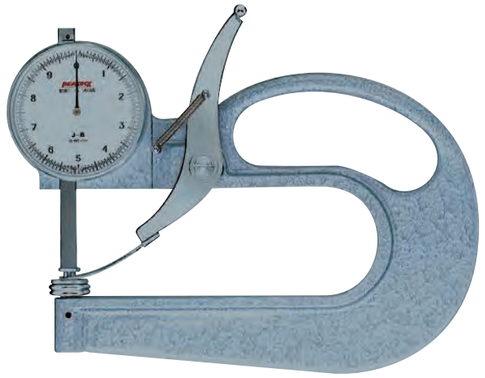
These large thickness gauges having extended throat depth to measure at the center of wide sheets.



J-A

Graduation: 0.01mm
Range: 0~20mm

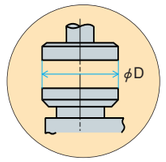
- The gauge sits by stand
- ϕ 10mm flat contact point and ϕ 20mm anvil (Metal)



J-B

Graduation: 0.05mm
Range: 0~35mm

- ϕ 20mm flat contact point and anvil (Metal)



Custom order available

Optional ϕ 30,40 and 50mm contact points and anvils are available.
Please specify material for contact point and anvil, either Metal (SK) material or aluminum (AL).

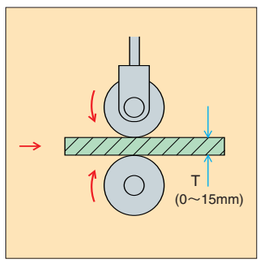
Specifications

Model	Graduation (mm)	Range (mm)	Throat depth (mm)	Accuracy (μm)	Contact Point		Measuring force less than (N)
					Dia (mm)	Parallelism (μm)	
J-A	0.01	0~20	150	±22	10	5	2.0
J-B	0.05	0~35	140	±100	20	25	3.0

Dial Thickness Gauge Roller type

Special gauges for measuring of horizontally sliding a gauge with an object to be in inspected laid since the contact point and anvil are made with the roller. Convenient to continuously measuring thickness of thin objects, paper, rubber and film etc.

HR-1



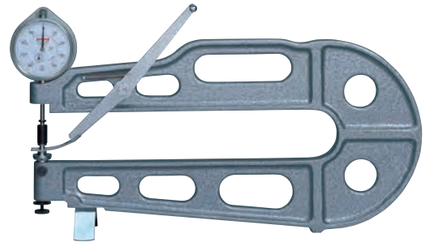
Specifications

Model	Graduation (mm)	Range (mm)	Throat depth (mm)	Accuracy (μm)	Roller contact points			Measuring force less than (N)
					OD (mm)	Width (mm)	Parallelism (μm)	
HR-1	0.01	0~15	70	±22	22	7	10	2.0

Dial Sheet Gauges

0.01mm and 0.05mm

- The sheet gauges can measure wide sheets since the throat depth of this gauges having 300, 500 and 690mm.



K-1

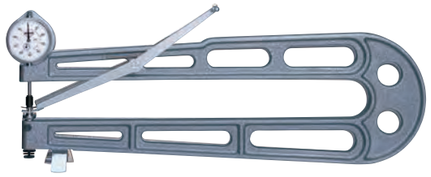
Graduation: 0.01mm
Range: 0~20mm

- ϕ 10mm flat contact point and ϕ 20mm anvil (Metal)

K-2

Graduation: 0.05mm
Range: 0~35mm

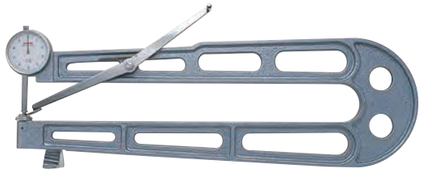
- ϕ 20mm flat contact point and anvil (Metal)



K-3

Graduation: 0.01mm
Range: 0~20mm

- ϕ 10mm flat contact point and ϕ 20mm anvil (Metal)



K-4

Graduation: 0.05mm
Range: 0~50mm

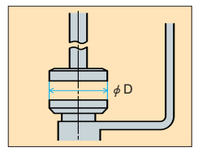
- ϕ 25mm flat contact point and anvil (Metal)

Custom order available

Optional ϕ 20, 30, 40 and 50mm Contact Point and Anvils are available.
Please specify material for Contact Point and Anvil, Metal (SK) or Aluminum (AL).

Examples

K-1	with ϕ20mm Flat Contact & Anvil SK or AL.	K-2	with ϕ20mm Flat Contact & Anvil AL (SK is standard),
	with ϕ30mm Flat Contact & Anvil SK or AL.		with ϕ30mm Flat Contact & Anvil SK or AL.
	with ϕ40mm Flat Contact & Anvil SK or AL.		with ϕ40mm Flat Contact & Anvil SK or AL.
	with ϕ50mm Flat Contact & Anvil SK or AL.		with ϕ50mm Flat Contact & Anvil SK or AL.
K-3	with ϕ20mm Flat Contact & Anvil SK or AL.	K-4	with ϕ20mm Flat Contact & Anvil SK or AL.
	with ϕ30mm Flat Contact & Anvil SK or AL.		with ϕ30mm Flat Contact & Anvil SK or AL.
	with ϕ40mm Flat Contact & Anvil SK or AL.		with ϕ40mm Flat Contact & Anvil SK or AL.
	with ϕ50mm Flat Contact & Anvil SK or AL.		with ϕ50mm Flat Contact & Anvil SK or AL.



Specifications

Model	Graduation (mm)	Range (mm)	Throat depth (mm)	Accuracy (μm)	Contact Point		Measuring force less than (N)
					Dia (mm)	Parallelism (μm)	
K-1	0.01	0~20	300	±22	10	10	2.0
K-2	0.05	0~35	300	±100	20	25	3.0
K-3	0.01	0~20	500	±22	10	10	3.0
K-4	0.05	0~50	500	±100	25	25	3.0

Dial Pipe Gauges

Special gauges for measuring wall thickness of pipes.

P-1

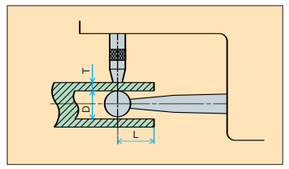
Graduation: 0.01mm
Range: 0~10mm

P-2

Graduation: 0.01mm
Range: 0~15mm

P-3

Graduation: 0.01mm
Range: 0~15mm



Specifications

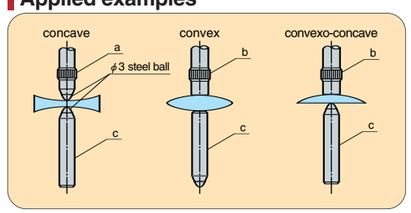
Model	Graduation (mm)	Range (mm)	Accuracy (μm)	Pipe size measurable (mm)			Measuring force less than (N)
				Minimum bore D	Maximum wall thickness T	Depth L	
P-1	0.01	0~10	±20	2.5	10	10	1.8
P-2	0.01	0~15	±22	5.1	15	50	1.8
P-3	0.01	0~15	±22	9.0	15	50	1.8

Dial Lens Gauge

The dial lens gauge can measure convex, concave, convexo-concave and any other lenses in the same gauge by replacing the two contact points and the anvil.

Replaceable Flat contact point
(Standard accessory)

Applied examples



GL

Graduation: 0.01mm
Range: 10mm

Specifications

Model	Graduation (mm)	Range (mm)	Accuracy (μm)	Throat depth (mm)	maximum lens diameter measurable (mm)	maximum lens thickness measurable (mm)	Measuring force less than (N)
GL	0.01	10	±20	30	ϕ 59	※ 20	1.8

※ Anvil side is adjustable.

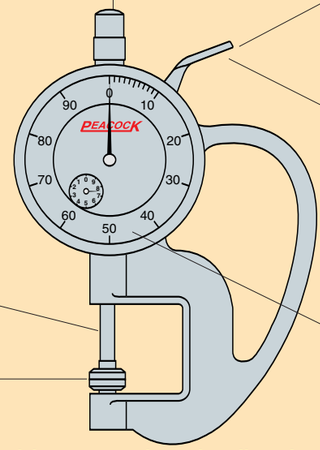
Dial Thickness Gauge (Special Order)

● Snap type
(Spindle is manually pushed down)

We manufacture with low or high measuring force according to your needs.

- Maximum Measuring force under 2.4N (240gf)
- Minimum Measuring force over 0.4N (40gf)

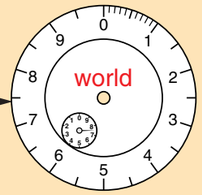
Please specify the desired Measuring force.



● Lever type (example of use)

● For measuring thickness of hair

● For measuring thickness of paper

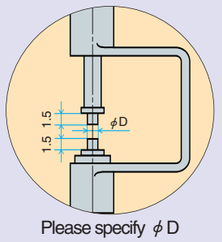


● For different applications, the shape of the contact point and anvil can be special ordered.

- Dial face with personal logo
- Special order dial faces

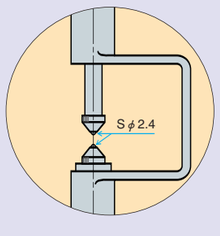
Examples of modification for contact point and anvil

① **Both Contact Point and Anvil needle type**

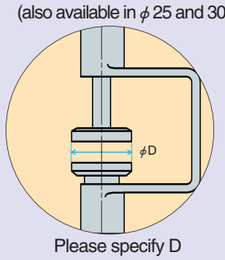


Please specify ϕ D

② **Both Contact Point and Anvil ball type**

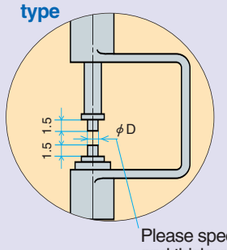


③ **Both Contact Point and Anvil are 20mm diameter flat type**
(also available in ϕ 25 and 30mm)



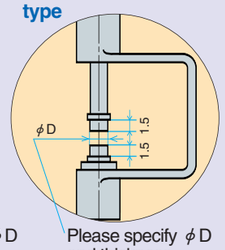
Please specify D

④ **Both Contact Point and Anvil are horizontal blade type**



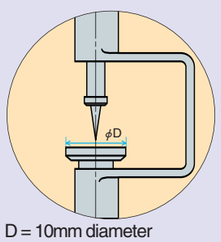
Please specify ϕ D and thickness.

⑤ **Both Contact Point and Anvil are vertical blade type**



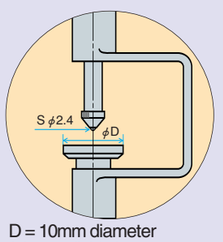
Please specify ϕ D and thickness.

⑥ **Needle type Contact Point and Flat type Anvil.**



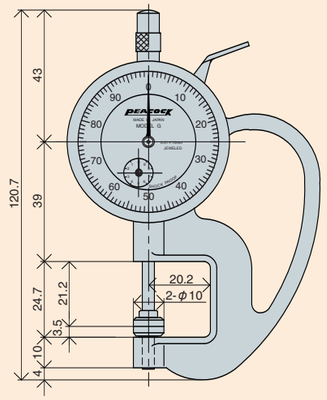
D = 10mm diameter
(also available in ϕ 20, 25 and 30mm)

⑦ **Ball type Contact Point and Flat type Anvil.**

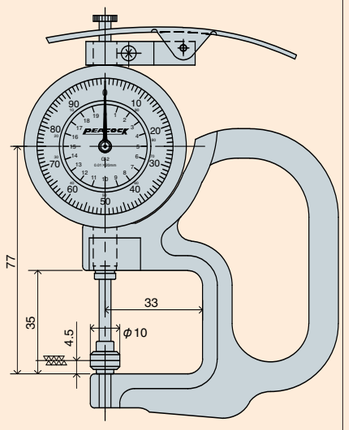


D = 10mm diameter
(also available in ϕ 20, 25 and 30mm)

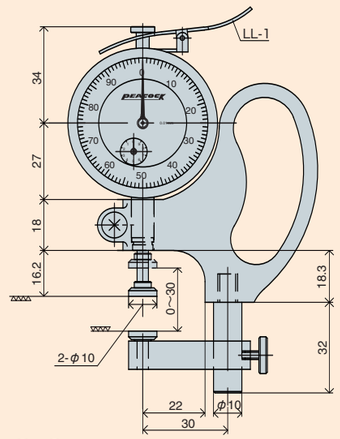
Dial Thickness Gauges / Dial Lens Gauge / Dial Pipe Gauges



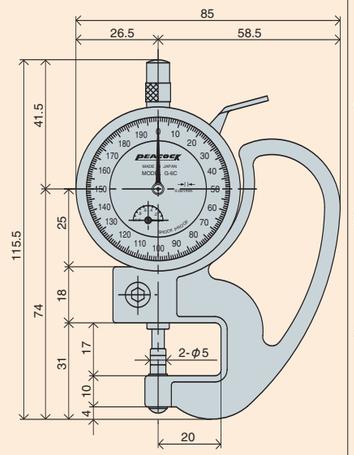
G/G-0.4N/G-2.4N



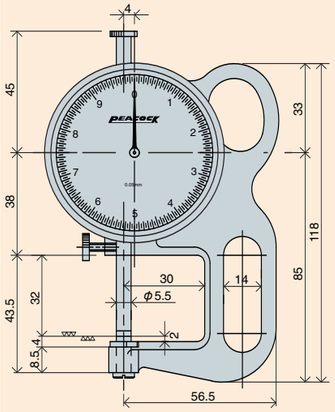
G-2



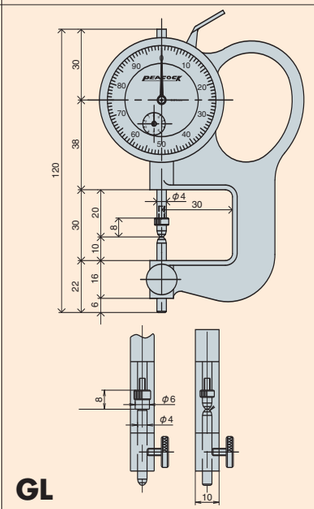
G-3



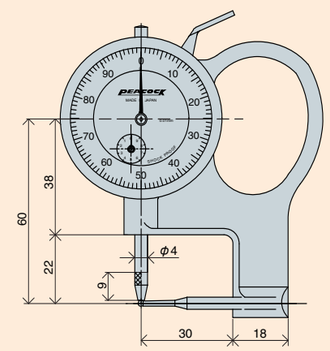
G-6C



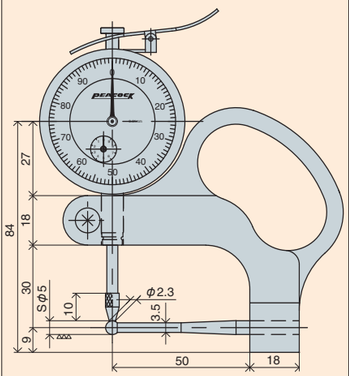
Q-1



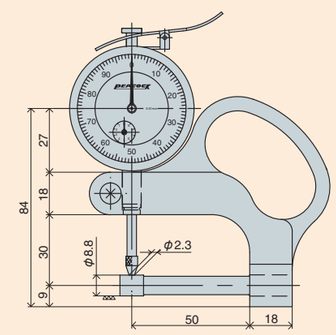
GL



P-1



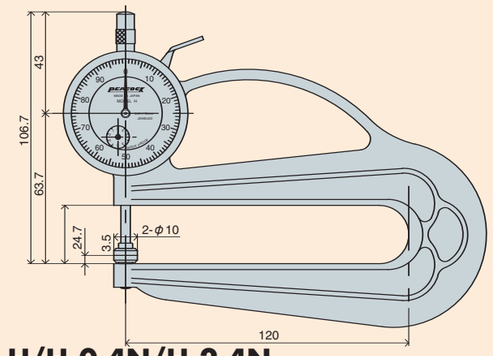
P-2



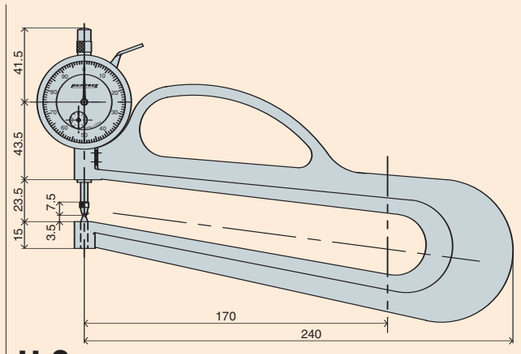
P-3

SINCE 1916 PEACOCK
6
Dial Thickness Gauges / Dial Lens Gauge / Dial Pipe Gauges

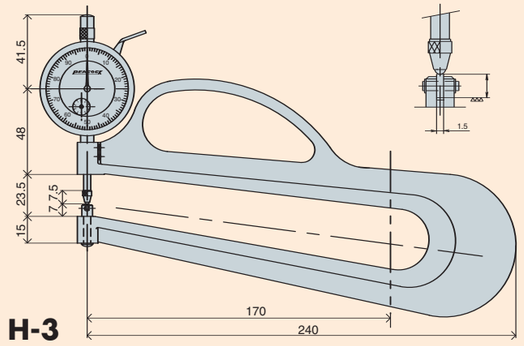
Dial Thickness Gauges / Dial Lens Gauge / Dial Pipe Gauges



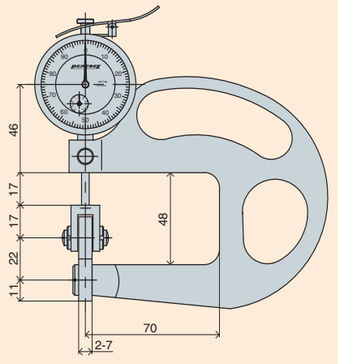
H/H-0.4N/H-2.4N



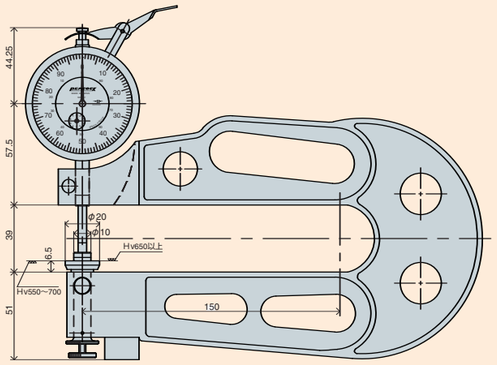
H-2



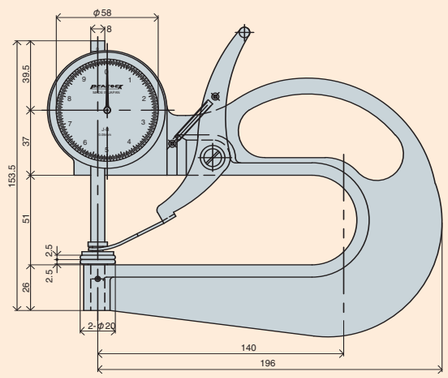
H-3



HR-1



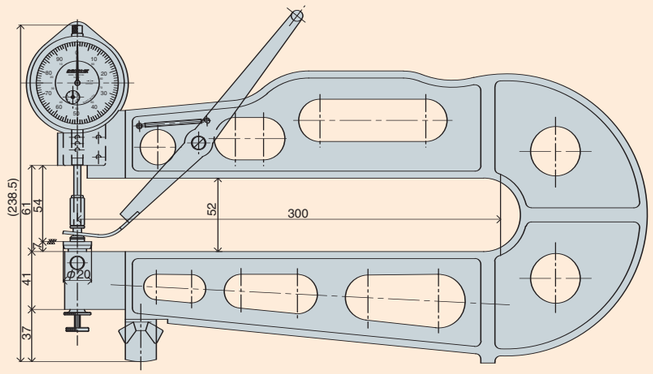
J-A



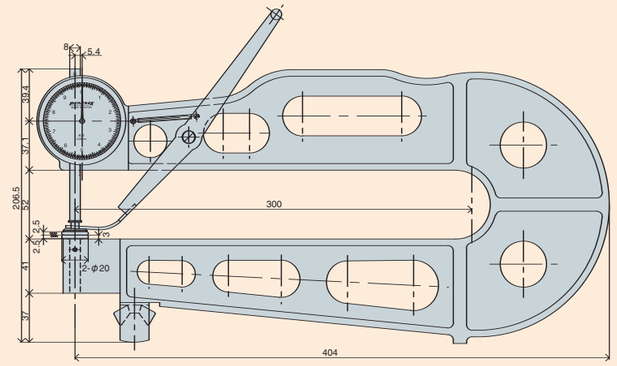
J-B

Dial Sheet Gauges

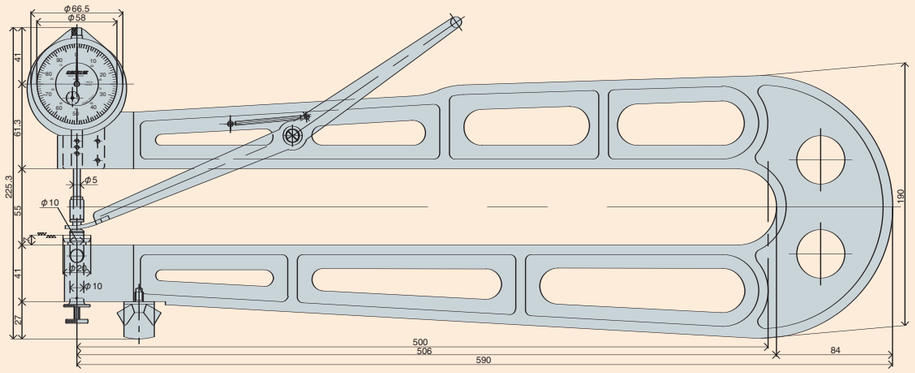
K-1



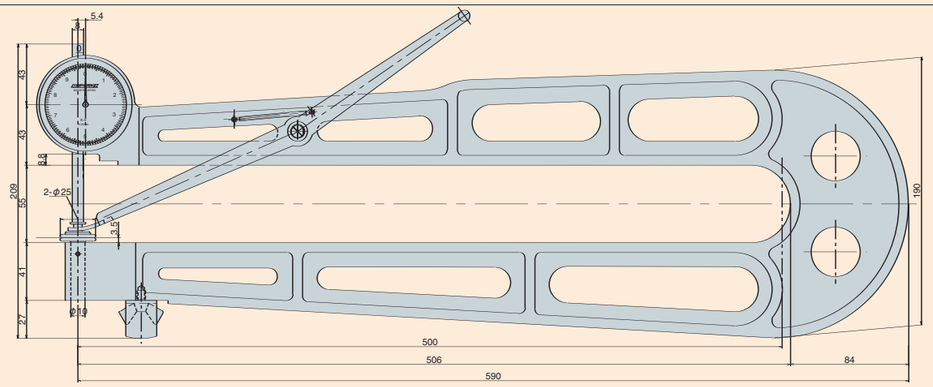
K-2



K-3



K-4



MEMO

Dial Upright Gauges

R series

Best suited for measuring precision parts and testing materials like rubber, leather, fabric and plastic etc. Rubber, leather, urethane and film can be easily measured by this system.

- The table of R1 series are adjustable up and down by the nut installed side way.
- The dial gauge is affixed to the body.

R1-A

Graduation: 0.001mm
Range: 2mm
Effective measuring range: 10mm

R1-B

Graduation: 0.01mm
Range: 10mm
Effective measuring range: 25mm

R1-C

Graduation: 0.01mm
Range: 20mm
Effective measuring range: 20mm

Specifications

Model	Dial Indicator (standard attachments)			Indication error (μm)	Table diameter (mm)	Contact point dia. (mm)	Measuring force less than (N)	Measuring depth (mm)	Effective measuring range(mm)	Total height (mm)
	Gauge installed	Range (mm)	Graduation (mm)							
R1-A	25F-RE	2	0.001	±7	40	5	1.5	55	10	191
R1-B	107F-RE	10	0.01	±15	40	5	1.4	55	25	190
R1-C	207F-PL	20	0.01	±22	40	5	2.0	55	20	210

Constant Pressure Thickness Gauges (Special Order)

- Constant Pressure Thickness Gauges can be made to comply with JIS by attaching exact weights that create the specific pressures needed to measure different materials.
- Three types (FFG. FFA. FFD series) are available to meet your measurement.

Compact Handy type FFG series (PAT.No.3073347)

Measuring material	JIS No.	Applied Model
Shrink package film	ZI709	**FFG-1**
Polyethylene package film	ZI702	**FFG-1**
Ethylene film	K6783	**FFG-1**
Polyvinyl chloride film	K6732	**FFG-2**
Sheet Rubber	K6328	**FFG-4**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD less)	K6250A	**FFG-5**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD less)	K6250A	**FFG-6**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD more)	K6250A	**FFG-7**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD more)	K6250A	**FFG-8**
Urethane form	K6402	**FFG-9**
Common fabric (basic / fuzzy material)	L1096	**FFG-11**
Adhesive interlined cloth (common weave / common knit / non-woven)	L1086	**FFG-11**
Stockinet (common knit)	L1018	**FFG-11**
Unwoven / interlined cloth (old standard)	L1085	**FFG-12**
Adhesive interlined cloth (non-woven)	L1086	**FFG-12**

Specifications

Model	Graduation (mm)	Range (mm)	Indication error (μm)	Throat depth (mm)	Contact Point dia (ømm)	Anvil dia (ømm)	Measuring force N(gf)	Parallelism (μm)
FFG-1	0.001	2	±10	24	5	30	1.25±0.15 (125±15)	5
FFG-2	0.001	2	±10	24	5	30	less than 0.8 (less than 80)	5
FFG-4	0.01	10	±22	24	10	30	less than 0.8 (less than 80)	7
FFG-5	0.01	7	±22	24	5 (19.625mm²)	30	0.2±0.04 (20±4)	5
FFG-6	0.01	10	±22	24	8 (50.24mm²)	30	0.51±0.1 (51±10)	7
FFG-7	0.01	10	±22	24	5 (19.625mm²)	30	0.44±0.1 (44±10)	5
FFG-8	0.01	10	±22	24	8 (50.24mm²)	30	1.13±0.26 (113±26)	7
FFG-9	0.01	10	±22	24	35.7 (10cm²)	40	less than 0.37 (less than 37)	25
FFG-11	0.01	10	±22	24	25.2 (5cm²)	30	less than 0.35 (less than 35)	20
FFG-12	0.01	10	±22	24	16 (2cm²)	30	less than 0.4 (less than 40)	15

Constant Pressure Thickness Gauges (Order)

Stand type FFA series

FFA-7

Measuring material	JIS No.	Applied Model
Shrink package film	ZI709	**FFA-1**
Polyethylene package film	ZI702	**FFA-1**
Ethylene film	K6783	**FFA-1**
Polyvinyl chloride film	K6732	**FFA-2**
Leather	K6550	**FFA-3**
Artificial leather	K6505	**FFA-3**
Sheet rubber	K6328	**FFA-4**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD less)	K6250A	**FFA-5**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD less)	K6250A	**FFA-6**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD more)	K6250A	**FFA-7**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD more)	K6250A	**FFA-8**
Urethane form	K6402	**FFA-9**
Common fabric (basic / fuzzy material)	L1096	**FFA-10**
Adhesive interlined cloth (common weave / common knit / non-woven)	L1086	**FFA-10**
Common fabric (basic / fuzzy material)	L1096	**FFA-11**
Adhesive interlined cloth (common weave / common knit / non-woven)	L1086	**FFA-11**
Stockinet (common knit)	L1018	**FFA-11**
Unwoven / interlined cloth (old standard)	L1085	**FFA-12**
Adhesive interlined cloth (non-woven)	L1086	**FFA-12**
Tensile properties of plastics	K7113	**FFA-13**

Specifications

Model	Graduation (mm)	Range (mm)	Indication error (μm)	Throat depth (mm)	Contact Point dia (ømm)	Anvil dia (ømm)	Spindle lifting	Stand type	Measuring force N(gf)	Parallelism (μm)
FFA-1	0.001	2	±8	55	5	40	Lever	R1 type	1.25±0.15 (125±15)	5
FFA-2	0.001	2	±8	55	5	40	Release	R1 type	less than 0.8 (less than 80)	5
FFA-3	0.01	10	±20	55	10	50	Lever	SIS-6C special	3.93±0.1 (393±10)	10
FFA-4	0.01	10	±20	55	10	50	Release	SIS-6C	less than 0.8 (less than 80)	7
FFA-5	0.01	7	±20	55	5 (19.625mm²)	50	Release	SIS-6C	0.2±0.04 (20±4)	5
FFA-6	0.01	10	±20	55	8 (50.24mm²)	50	Release	SIS-6C	0.51±0.1 (51±10)	7
FFA-7	0.01	10	±20	55	5 (19.625mm²)	50	Release	SIS-6C	0.44±0.1 (44±10)	5
FFA-8	0.01	10	±20	55	8 (50.24mm²)	50	Lever	SIS-6C	1.13±0.26 (113±26)	7
FFA-9	0.01	10	±20	55	35.7 (10cm²)	50	Release	SIS-6C	less than 0.37 (less than 37)	25
FFA-10	0.01	10	±20	55	11.3 (1cm²)	50	Lever	SIS-6C	less than 2.4 (less than 240)	10
FFA-11	0.01	10	±20	55	25.2 (5cm²)	50	Release	SIS-6C	less than 0.35 (less than 35)	20
FFA-12	0.01	10	±20	55	16 (2cm²)	50	Release	SIS-6C	less than 0.4 (less than 40)	15
FFA-13	0.01	10	±20	55	10 (78.5cm²)	50	Lever	SIS-6C	less than 1.57 (less than 157)	7

Digital type FFD series (with data output)

FFD-1

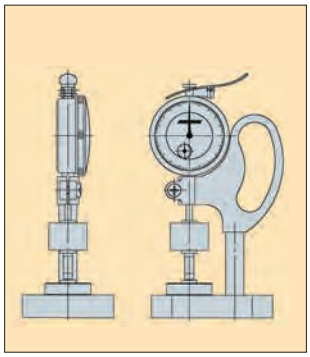
Measuring material	JIS No.	Applied Model
Shrink package film	ZI709	**FFD-1**
Polyethylene package film	ZI702	**FFD-1**
Ethylene film	K6783	**FFD-1**
Polyvinyl chloride film	K6732	**FFD-2**
Leather	K6550	**FFD-3**
Artificial leather	K6505	**FFD-3**
Sheet rubber	K6328	**FFD-4**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD less)	K6250A	**FFD-6**
Vulcanized rubber / Thermoplastic rubber (Hardness 35IRHD more)	K6250A	**FFD-7**
Vulcanized rubber / Thermoplastic rubber	K6250A	**FFD-8**
Common fabric (basic / fuzzy material)	L1096	**FFD-10**
Adhesive interlined cloth (common weave / common knit / non-woven)	L1086	**FFD-10**
Tensile properties of plastics	K7113	**FFD-13**

Specifications

Model	Range (mm)	Indication error (μm)	Graduation (mm)	Display	Power supply	Data output	Throat depth (mm)	Contact Point dia (ømm)	Anvil dia (ømm)	Measuring force N(gf)	Parallelism (μm)
FFD-1	20	±4	0.001	5digit	AC Adapter (100V to 240V)	RS-232C	55	5	40	1.25±0.15 (125±15)	5
FFD-2	20	±4	0.001				55	5	40	less than 0.8 (less than 80)	5
FFD-3	20	±20	0.01	4digit			55	10	50	3.93±0.1 (393±10)	10
FFD-4	20	±20	0.01				55	10	50	less than 0.8 (less than 80)	10
FFD-6	20	±20	0.01				55	8 (50.24mm²)	50	0.51±0.1 (51±10)	10
FFD-7	20	±20	0.01				55	5 (19.625mm²)	50	0.44±0.1 (44±10)	10
FFD-8	20	±20	0.01				55	8 (50.24mm²)	50	1.13±0.26 (113±26)	10
FFD-10	20	±20	0.01				55	11.3 (1cm²)	50	less than 2.4 (less than 240)	10
FFD-13	20	±20	0.01				55	10 (78.5mm²)	50	less than 1.57 (less than 157)	10

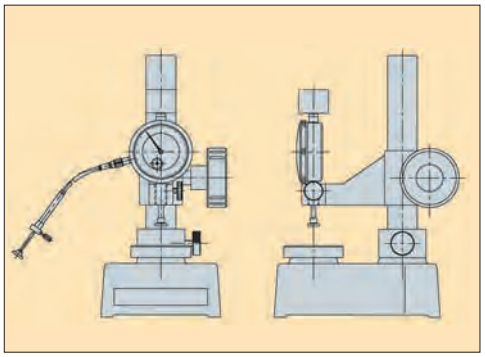
Special Order Available

FFG Series



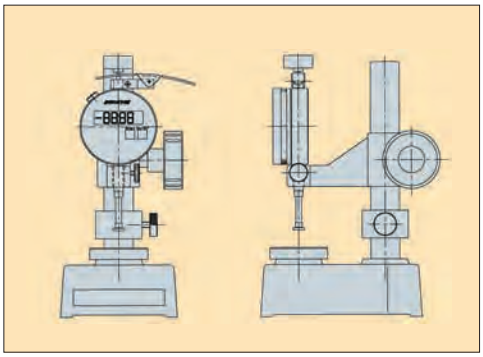
Handy type

FFA Series



Stand type

FFD Series



Digital type

Please specify what you want to measure as following:

1. Material of measurement work-piece:

2. JIS Standard No. or its equivalent standard:

3. Resolution: 0.01mm, 0.001mm

4. Measuring force:

5. Diameter of Contact Point (ex. ϕ5, ϕ10mm)

6. Type of Constant Pressure Thickness Gauge

Please check ☑

- ☐ FFG Handy type
- ☐ FFA Stand type
- ☐ FFD Digital type

7. Other requirement:

SECTION 7

Dial Caliper Gauges

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

Dial Calipers

LA series (Outside measuring of ODs and thicknesses)

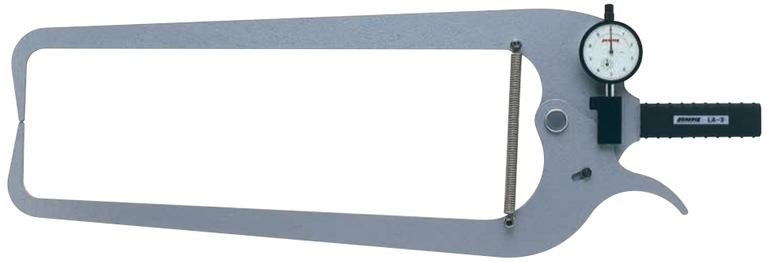
The dial caliper gauge show its great power in measurement of inside and outside sizes, wall thickness, groove width and hole diameters and any other shapes and sections that is not apparently accessible.

LA-1

Graduation: 0.1mm
Range: 0~80mm
Throat depth: 120mm

LA-2

Graduation: 0.1mm
Range: 0~80mm
Throat depth: 240mm

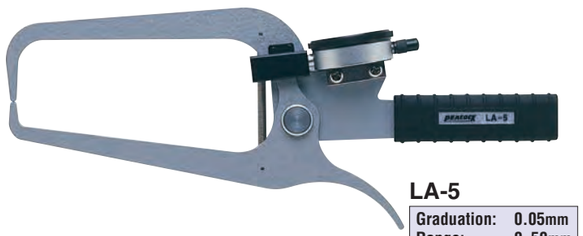


LA-3

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

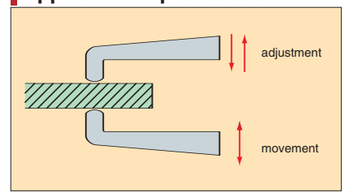
Graduation: 0.1mm
Range: 0~80mm
Throat depth: 130mm

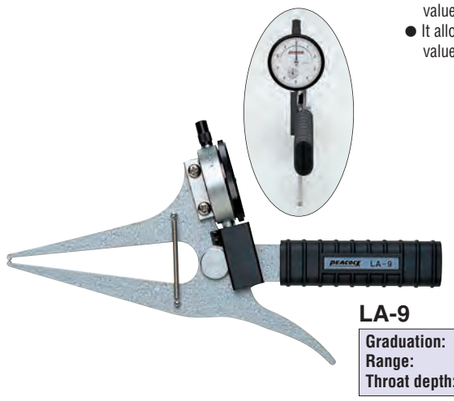
LA-7

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

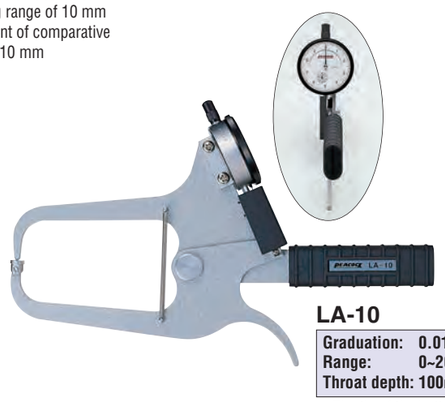
Applied Example – outside –





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 ⌀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) see page 100			
					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

LA-11

Graduation:	0.1mm
Range:	0~50mm
Throat depth:	125mm

LA-13

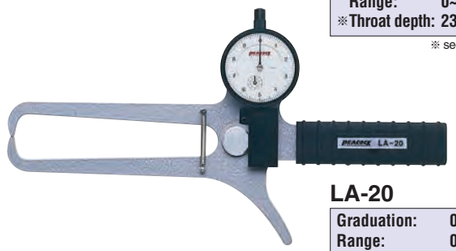
Graduation:	0.1mm
Range:	0~130mm
※Throat depth:	235mm

※ see page 101

LA-14

Graduation:	0.01mm
Range:	100~150mm
Throat depth:	70mm

● LA-14 is for comparative measurement.

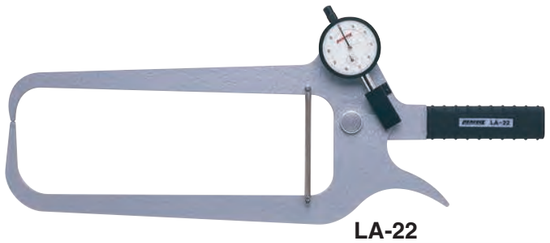


LA-20

Graduation:	0.1mm
Range:	0~80mm
Throat depth:	125mm

LA-21

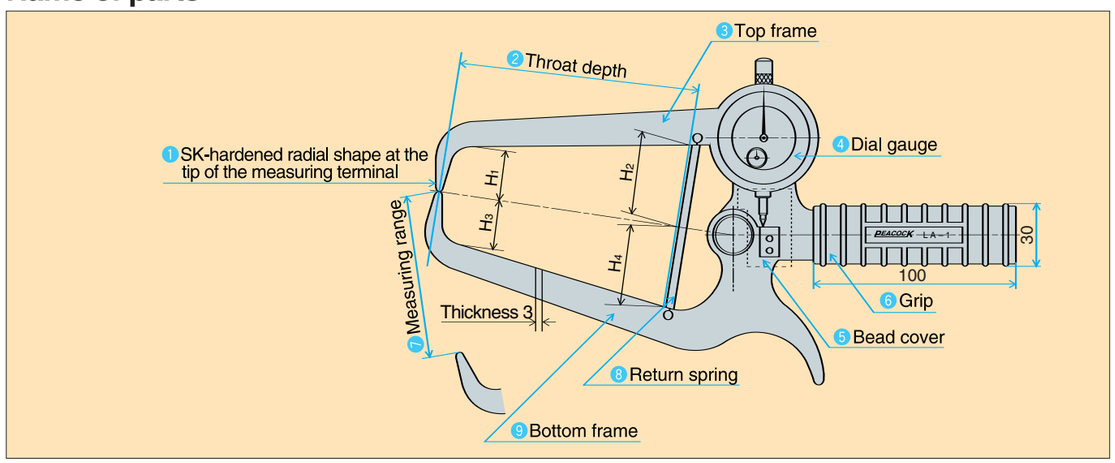
Graduation:	0.1mm
Range:	0~80mm
Throat depth:	220mm



LA-22

Graduation:	0.1mm
Range:	0~80mm
Throat depth:	250mm

Name of parts



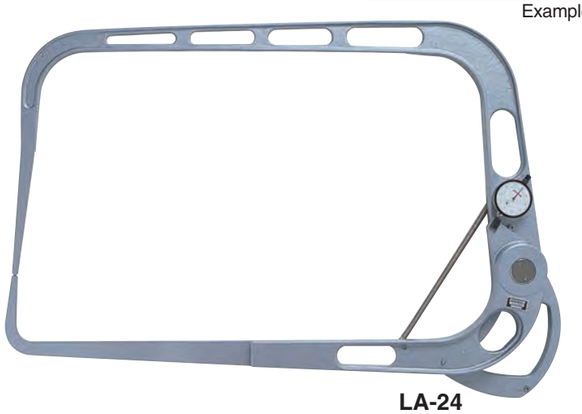
LA-23

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

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) see page 100			
					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	—	—

LB series (Inside measuring of ID and groove widths)

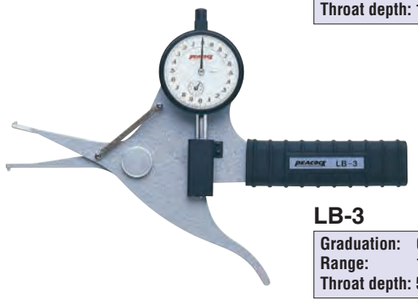
LB-1

Graduation:	0.1mm
Range:	10~90mm
Throat depth:	125mm

LB-2

Graduation:	0.1mm
Range:	10~90mm
※Throat depth:	180mm

※See page 103



LB-3

Graduation:	0.01mm
Range:	10~30mm
Throat depth:	50mm

LB-4

Graduation:	0.01mm
Range:	10~30mm
Throat depth:	100mm

LB-5

Graduation:	0.01mm
Range:	20~40mm
Throat depth:	150mm

LB-6

Graduation:	0.01mm
Range:	30~50mm
Throat depth:	80mm

LB-8

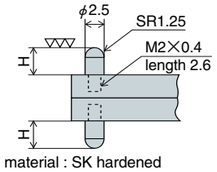
Graduation:	0.01mm
Range:	100~120mm
Throat depth:	90mm

LB-9

Graduation:	0.01mm
Range:	20~40mm
Throat depth:	130mm

Dimensions for contact point

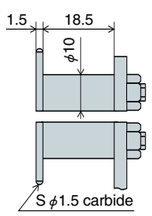
(LB-1・2・3・4・5・6・7、LH-2)



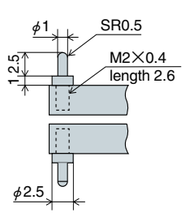
material : SK hardened

※ Hmm (height of contact point)
3, 4, 5, 6, 7, 8, 9, 10mm type are
available as options. Order pair as 1 set (2pcs).

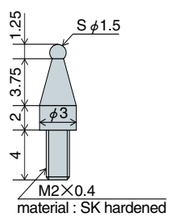
(LB-7V)



(LB-7S)



(LA-14・LB-14)



material : SK hardened

Adjustable type

LB-7

Graduation:	0.01mm
Range:	10~70mm
Throat depth:	85mm

● Adjustable frame

LB-7S

Graduation:	0.01mm
Range:	15~35mm
Throat depth:	50mm

● Adjustable frame

LB-7V

Graduation:	0.01mm
Range:	35~85mm
Throat depth:	20mm

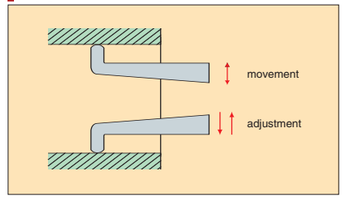
● Adjustable frame

LB-14

Graduation:	0.01mm
Range:	100~150mm
Throat depth:	70mm

● Adjustable frame

Applied Example – inside –



Handy type

LH-2

Graduation:	0.01mm
Range:	10~120mm
Throat depth:	50mm

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

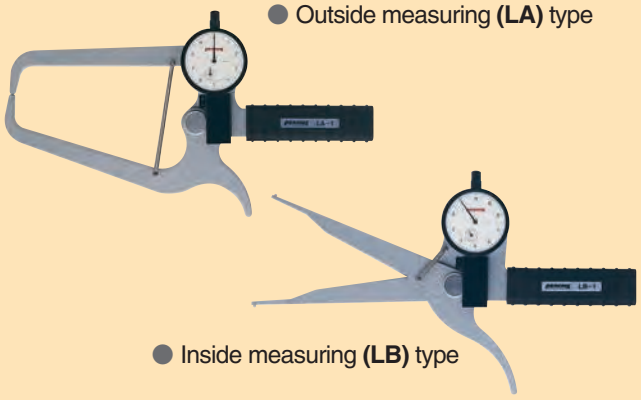
Specifications

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.

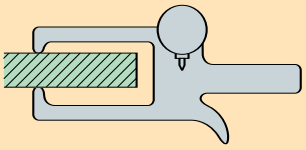
"PEACOCK" Caliper Gauges are quite useful for such measurements of O.D. or I.D. thickness and diameter which appear so difficult to measure.

Examples

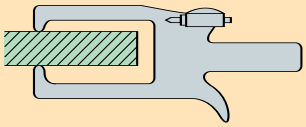


● Outside measuring **(LA)** type

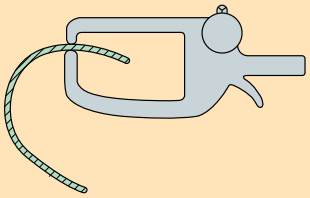
● Inside measuring **(LB)** type



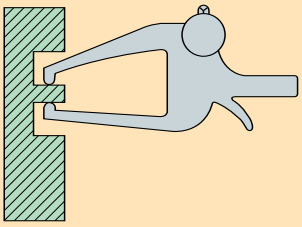
● Measuring thickness at the back end of a projecting workpiece
LA-1～4
LA-13
LA-20～23



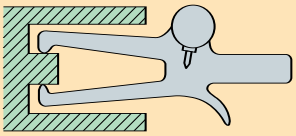
● Measuring thickness at the back end of a projecting workpiece
● Dial upward type
LA-5
LA-5S



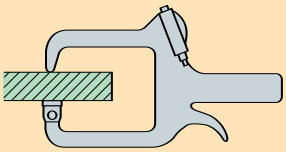
● Measuring thickness of a cup, hat or helmet
LA type



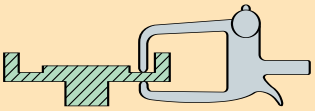
● Measuring thickness or OD in a narrow, confined place
LA type



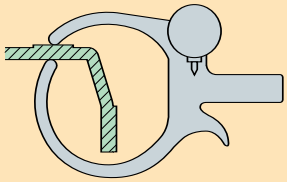
● Measuring center OD of a boss
LA-11



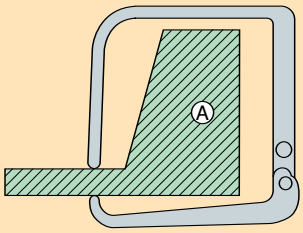
● Floating type: lower contact point has a flat 10mm diameter
LA-10



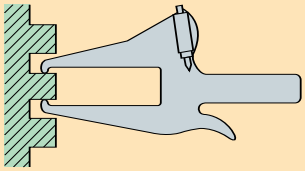
● Measuring thickness by hurdling a projecting area
LA type



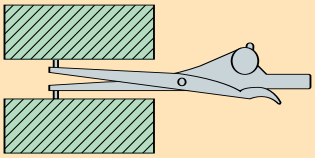
● Measuring thickness by hurdling a projecting area
LA-8



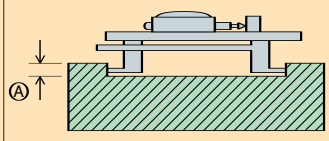
● Measuring thickness of a large workpiece or part.
A: workpiece sizes up to 500mm are accessible (LA-24).



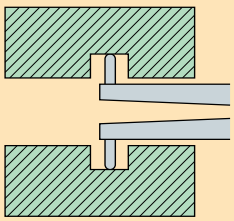
● Measuring thickness or OD in a narrow, confined place
LA-9
LA-11



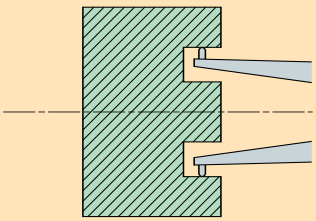
● Measuring ID or groove width
LB-1～6



● Measuring ID of a very shallow hole
A : approximately 2mm lip is sufficient (LB-7V)



● Measuring ID or an O-ring groove
LB-1～6



● Measuring ID by straddling the center boss
LB-7
LB-14

SECTION

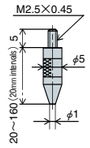
8

Applied Dial Gauges

- Dial Depth Gauges
- Dial Inside Gauges
- Dial Hole Gauge
- Applied Contact Points
- Bench Center

Dial Depth Gauges

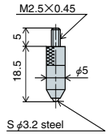
It measure a depth from top bottom of bottomed holes, a depth of narrow grooves, a value of step height of stepped surfaces and a depth of types engraved in matrices.
The dial gauge furnished offers a correct measured value since it can measure an object under measurement with a given measuring force.



T-1

Graduation: 0.01mm
Range: 0~160mm

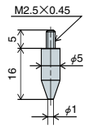
- 8 contact points are included 20~160mm.
- Replace the contact point in accordance with the measuring range.



T-1W

Graduation: 0.01mm
Range: 0~220mm

- 4 extension rods are included 20, 40, 60 and 80mm.
- Recombine the extension rods, in accordance with the measuring range.
- Two center-pointer type.

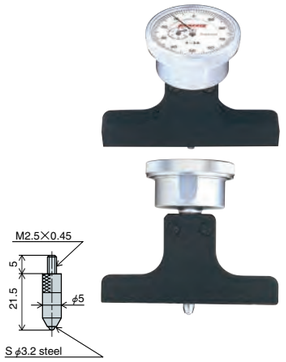


T-2

Graduation: 0.01mm
Range: 0~10mm

T-2W

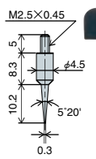
Graduation: 0.01mm
Range: 0~20mm



T-2B

Graduation: 0.01mm
Range: 0~5mm

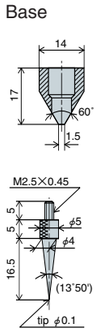
- The dial face is at a right angle with the contact point, which facilitate easy reading from the upside.



T-2C

Graduation: 0.01mm
Range: 0~10mm

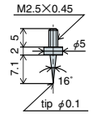
- Needle Contact Point (XT-2C)



T-3

Graduation: 0.01mm
Range: 0~10mm

- Needle Contact Point (XT-3)



T-4

Graduation: 0.001mm
Range: 0~1mm

- Needle Contact Point (XT-4)

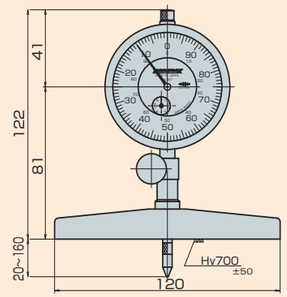
Specifications

Model	Range (mm)	Accuracy (μm)	Dial Gauge				Base	
			Gauge installed	Graduation (mm)	Range (mm)	Measuring force less than (N)	Length (mm)	Width (mm)
T-1	0~160	±20	207F-T	0.01	20	2.0	120	14
T-1W	0~220	±20	207WF-T	0.01	20	2.0	100	11
T-2	0~10	±15	107F-T	0.01	10	1.4	60	14
T-2W	0~20	±20	207WF-T	0.01	20	2.0	75	11
T-2B	0~5	±20	196B-T	0.01	5	1.4	75	11
T-2C	0~10	±15	107F-T	0.01	10	1.4	75	11
T-3	0~10	±15	107F-T	0.01	10	1.4	60	Shown in above figure
T-4	0~1	±5	※5F	0.001	1	1.5	40	10

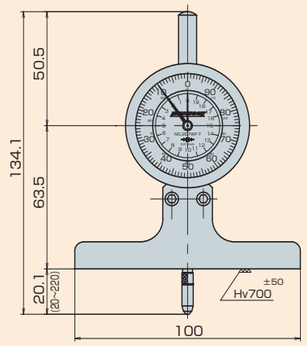
※ 5F with Reversed Inner Dial

※ Base is hardened and polished.

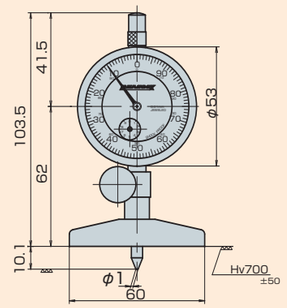
Outer Dimensions



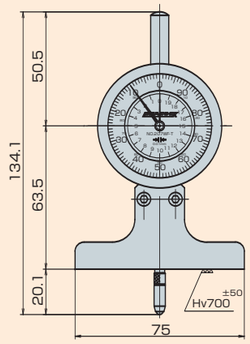
T-1



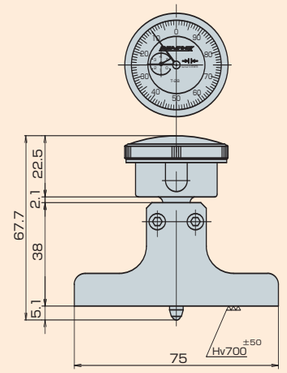
T-1W



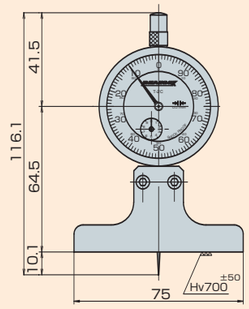
T-2



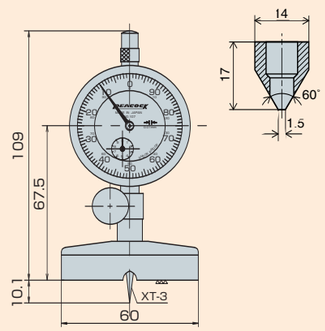
T-2W



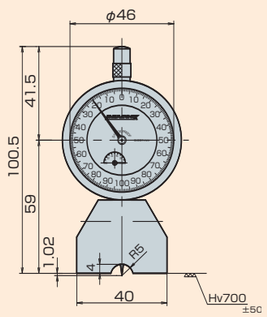
T-2B



T-2C



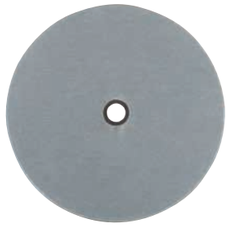
T-3



T-4

Dial Depth Gauge

Round Base type



- Base Outer dia. ϕ25.0
- Needle Contact Point dia. ϕ2.0

T-6A

Graduation: 0.01mm
Range: 0~10mm

- Base Outer dia. ϕ25.0
- Needle Contact Point dia. ϕ1.0

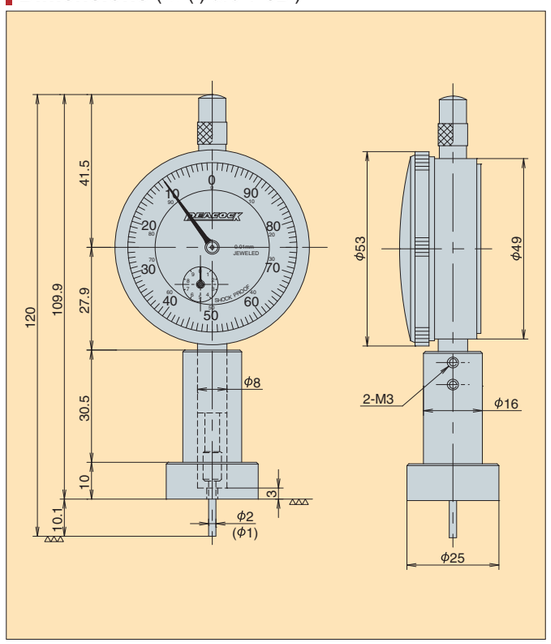
T-6B

Graduation: 0.01mm
Range: 0~10mm

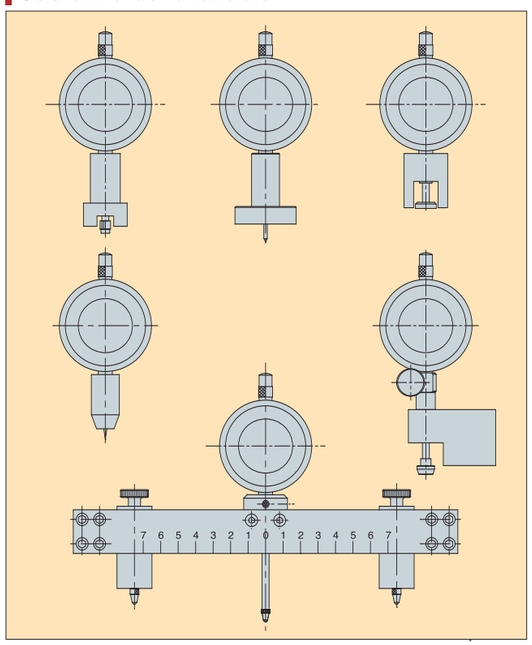
Specifications

Model	Range (mm)	Accuracy (μm)	Dial Gauge				Base	
			Gauge installed	Graduation (mm)	Range (mm)	Measuring force less than (N)	Length (mm)	Width (mm)
T-6A	0～10	±15	107F-T	0.01	10	1.4	—	—
T-6B	0～10	±15	107F-T	0.01	10	1.4	—	—

Dimensions (※ ( ) are T-6B)

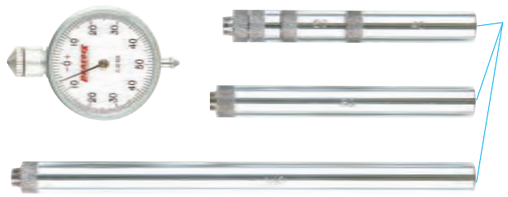


Custom order available



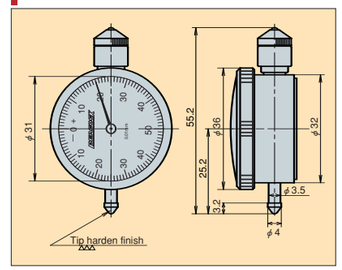
Dial Inside Gauge

- Capable of continuously measuring comparatively large bores or inside wall surface with a given measuring force using flexibility of the dial gauge.



- Extension rods 6pcs. (5,10, 20, 40, 80, 140mm)
  Replace the extension rods according to a measuring range.

Outer dimension



U-1

Graduation: 0.01mm
Range: 50~350mm
(Measuring range of dial gauge: 5mm)

With Magnetic Base

The gauge proper can be secured to the measuring position by the magnet base.

U2HA

Graduation: 0.01mm
Range: 66~80mm
(Measuring range of dial gauge: 4mm)

U2HB

Graduation: 0.01mm
Range: 80~92mm
(Measuring range of dial gauge: 4mm)

U2FA

Graduation: 0.01mm
Range: 92~110mm
(Measuring range of dial gauge: 5mm)

U2FB

Graduation: 0.01mm
Range: 110~120mm
(Measuring range of dial gauge: 5mm)

U3HA New

Graduation: 0.01mm
Range: 66~80mm
(Measuring range of dial gauge: 4mm)

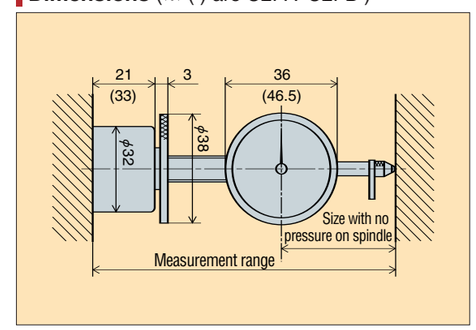
- with shorter pointer

U3HB New

Graduation: 0.01mm
Range: 80~92mm
(Measuring range of dial gauge: 4mm)

- with shorter pointer

Dimensions (※ ( ) are U2FA·U2FB)



Specifications

(unit: μm)

Model	Graduation (mm)	Range (mm)	Reading	Indication error					Magnetic Power (kg)	Measuring force less than (N)
				1／10 revolution (Adjacent error)	1／2 revolution	1 revolution	2 revolutions	Whole measuring range		
U-1	0.01	50～350	0 - 50 - 0	9	—	±13	—	±20	—	2.0
U2HA	0.01	66～80	0 - 50 - 0	9	—	±13	—	±15	8～10kg	1.4
U2HB	0.01	80～92	0 - 50 - 0	9	—	±13	—	±15		1.4
U2FA	0.01	92～110	0 - 50 - 0	9	—	±13	—	±20		2.0
U2FB	0.01	110～120	0 - 50 - 0	9	—	±13	—	±20		2.0
New **U3HA**	0.01	66～80	0 - 50 - 0	9	—	±13	—	±20		1.4
New **U3HB**	0.01	80～92	0 - 50 - 0	9	—	±13	—	±20		1.4

Dial Hole Gauge

The Dial Hole Gauge is used for measurement of a bore diameter or groove width.

- Adjustable upper frame may be changed as desired, thus securing a wide measuring range.
- The contact point has an outer dia of 2 mm and a height of 2 mm.
  (R 1mm ball, M1.7 x 0.35mm.)

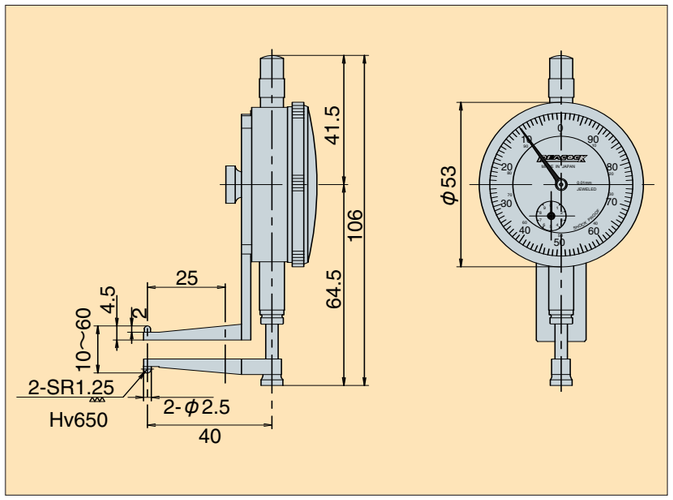
GH-1

Graduation:	0.01mm
Range:	10mm

Specifications

Model	Dial Gauge					Measurable bore ID (mm)	Measurable depth less than (mm)
	Graduation (mm)	Range (mm)	Accuracy(μm)	Reading	Measuring force less than (N)		
GH-1	0.01	10	±20	±100-50-0	1.4	10～50	25

Dimensions



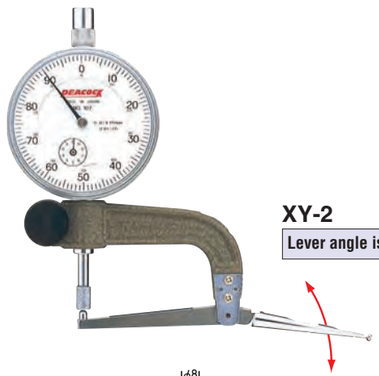
Applied Contact Points

Lever type Contact Points

Dial Gauges supplied on request (Recommend a Dial Gauge with Lug Back and install it to a Magnet Stand.)

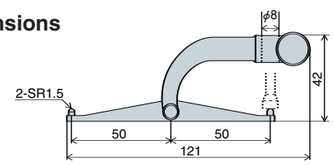
- This instrument have a 50mm length of lever and used to measure depth of holes.
  The flat contact point (XS-2) is installed to the dial gauge to hold the back when used.

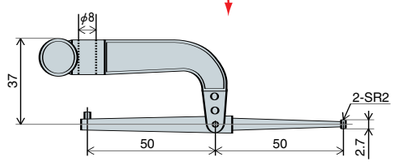
XY-1
Lever angle is fixed



XY-2
Lever angle is adjustable

Dimensions





Angle Contact Points

Dial Gauges supplied on request (Recommend a Dial Gauge with Flat Back due to light weight.)

- The contact point is tilted in its moving direction by the cam, and it includes two types; tilted to 45˚and 60˚.
  The contact point is convenient for measurement on locations where it is impossible to straightforwardly install the dial gauge and to use it for a jig.
  Hold the φ8 stem when used.

XZ-1

Range:	1.2mm
Angle:	45˚

φ 8mm

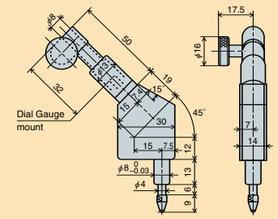
XZ-2

Range:	1.2mm
Angle:	60˚

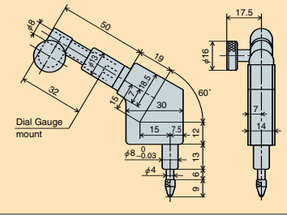
φ 8mm

Exterior dimensions

XZ-1



XZ-2



Specifications

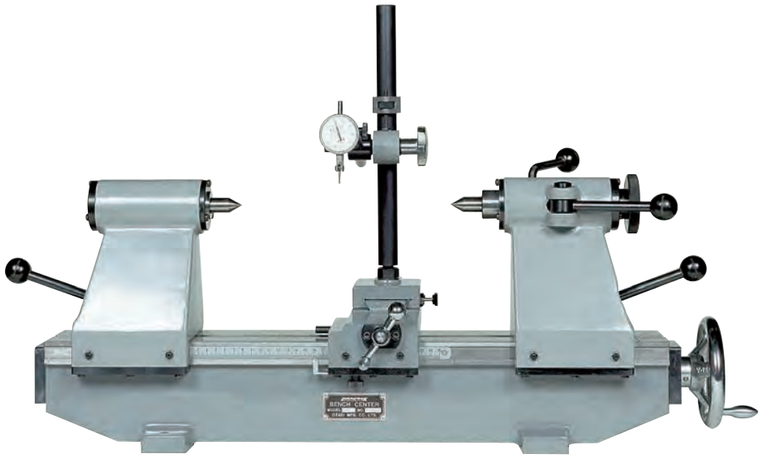
Model	Angle	Range (mm)	Moving distance (mm)	Measuring force less than (N)
XZ-1	45˚	1.2	5	1.4
XZ-2	60˚	1.2	5	1.4

- Angle 90˚ is available on request.

8

Bench Center

High-accuracy eccentricity tester used to measure eccentricity of articles over a wide range of rotary cutting tools, arbors, crankshafts, gears, piston heads or grinding stones and to check circles for roundness. (dial gauges are not furnished)

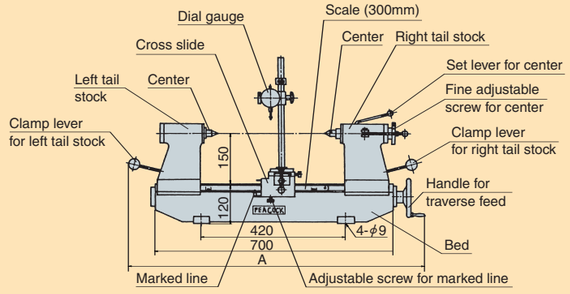


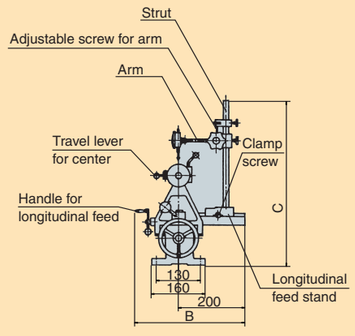
OA

Max. Center distance: 300mm

Dimensions (OA)

OA





Specifications

Model	Center distance (mm)	Max. work capacity dia. (mm)	Use center	Overall dimensions			Approx. weight (kg)	Feed gear	
				(A) mm	(B) mm	(C) mm		Right and left	Back and forth
OA	300	230	MT No. 2	Approx. 875	Approx. 335	500	51	Screw feed	Screw feed

OVER LOAD GAUGE for TIRE CURING MACHINE

For passenger vehicle tires and those for truck and bus tires
(Made to order)

We, "PEACOCK" make OVER LOAD GAUGES for TIRE CURING MACHINES that applied our Dial Gauge.

Example pictures of Over Load Gauge for TIRE CURING MACHINE

0-300TON
with Back Plate & Dust Proof Rubber
(Spec. Pointer 1 rotation: 0.5mm)

0-1000TON
with Dust Proof Rubber
(Spec. Pointer 1 rotation: 0.5mm)

1. For making the Dial Plate, please let us know the angle for range of graduation to meet with the Tightening force (TON) .

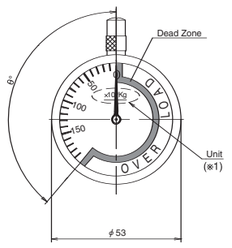
*see diagram as under. Example Spec. Pointer 1 rotation: 1mm

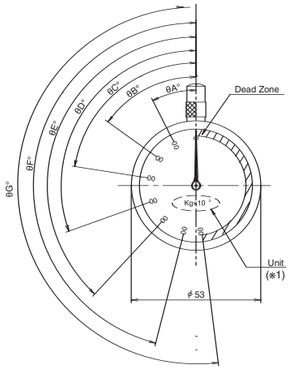
① Dial Plate

ⓐ Angle divide equally

Q1. Number of divide
Q2. Angle and number
Q3. Unit(※1) x10³ kg or TON

ⓑ Angle divide not equally





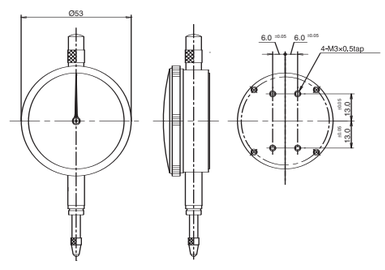
	Angle ex)12.3°	Dial Numeral ex)0-100
θA°		
θB°		
θC°		
θD°		
θE°		
θF°		
θG°		

*Please let us know pointer 1 rotation 0.5mm or 1mm.

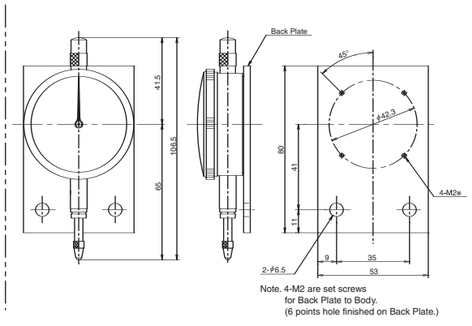
2. We provide the Over Load Gauge with Back Plate to meet with your Tire Curing Machine.
Dust Proof Rubber can be installed to the Spindle of Over Load Gauge.

② Backs

ⓐ Flat Back



ⓑ with Back Plate



Please contact your local "PEACOCK" distributor for your further inquiry or write to us at:

peacock-tokyo@peacockozaki.jp

MEMO

SECTION

9

Stands

- Dial Gauge Stands
- Magnetic Stands
- Magnetic Holder

Dial Gauge Stands

New

Stand designed for precision measurement of standard dial gauges, lever dial gauges and lever electric micrometers, rigid in construction and easy in fine adjustment of gauge indication by the original fine adjusting device.

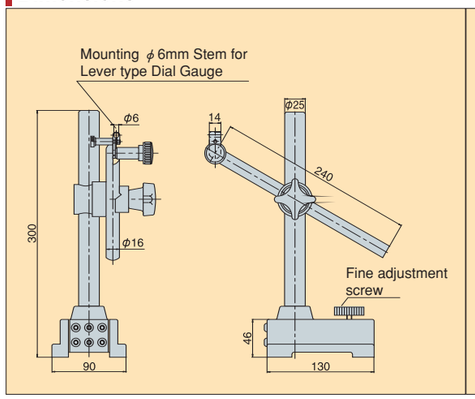
SIS-4F

● With fine adjustment
(Dial Gauge and Pic Test Indicator are not furnished.)

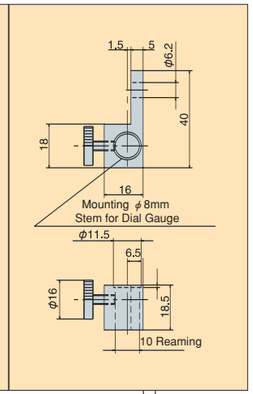
Mounting example for Dial Gauge
(ϕ 8mm Stem)

Mounting example for Pic Test Indicator
(ϕ 6mm Stem)

Dimensions



Attachment
(For Mounting a Dial Gauge)



Specifications

Model	Base			Main column		Support column		Weight (kg)	Included attachments
	Height (mm)	Length (mm)	Width (mm)	Diameter (mm)	Length (mm)	Diameter (mm)	Length (mm)		
SIS-4F	46	130	90	25	250	16	240	5.2	1. for Dial Gauges 2. for Lever type Dial Indicators

Economy-wise popular stand

SIS-6C

SIS-7

Specifications

Model	Table surface	Table size	Effective moving range	Allowable measuring depth	Stem installed
SIS-6C	Quench-hardened and polished	50mm diameter	0 to about 100 mm	Approximately 62.5mm	ϕ8mm (※ ϕ10mm)
SIS-7	Ground cast iron surface	74×74mm	0 to about 100 mm	Approximately 52mm	

※ ϕ10mm can be installed when split collar is removed.

The stand is designed for standard dial gauges and digital linear gauges and is rigid and easy to work.

PDS-2

PDS-2F

Specifications

Model	Table surface	Table size	Effective moving range	Allowable measuring depth	Stem installed
PDS-2	Ceramic with grooves	100×100mm	0 to about 100 mm	Approximately 60mm	ϕ8mm (※ ϕ20mm)
PDS-2F	Ceramic without grooves	100×100mm	0 to about 100 mm	Approximately 60mm	

※ ϕ20mm can be installed when split collar is removed.

Magnetic Stands

The stand using a powerful magnet features simple and stable holding at any place, easy handling, compactness and reasonable price.
Either lever dial gauge (held by ϕ 6 mm stem) or standard dial gauge (held by back lug) is attachable to all types of these magnetic stands.
The dial gauges are not furnished.

New

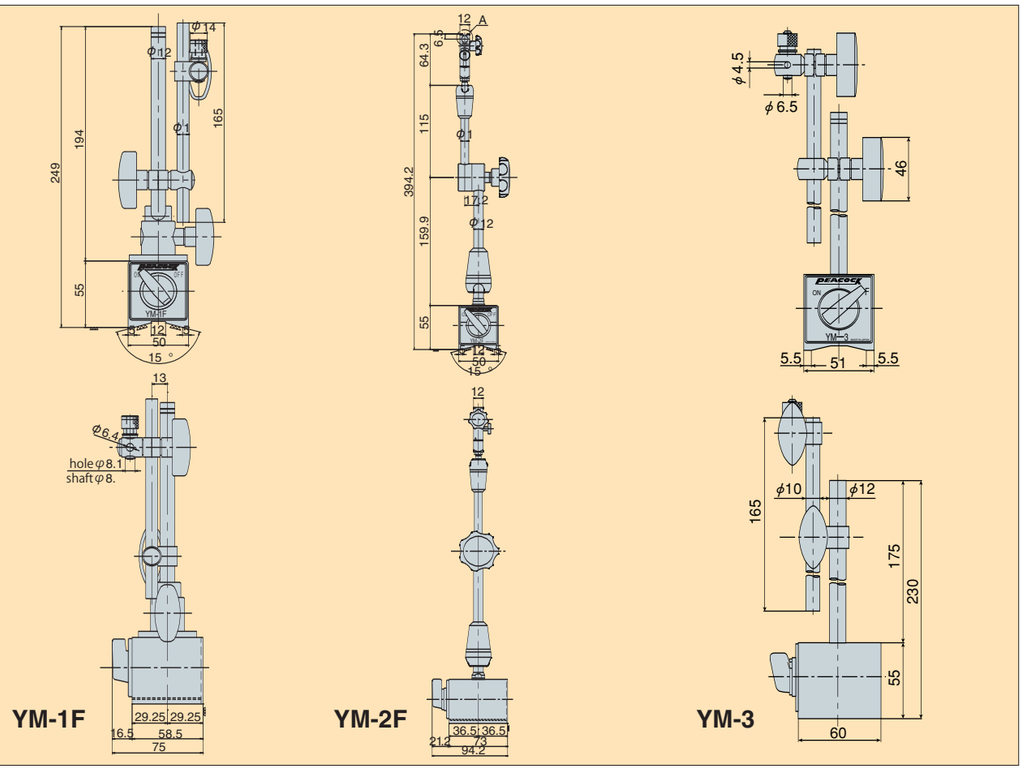
YM-1F
● Magnetic Power 80kgs

New

YM-2F
● Magnetic Power 100kgs

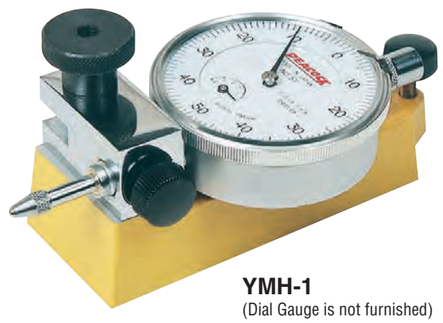
YM-3
● Magnetic Power 45kgs
● with fine adjustment

Dimensions



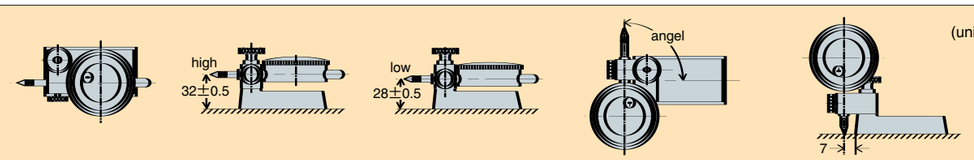
Magnetic Holder

The magnetic holder holds a dial gauge using the attractive forced of the magnet fit in the base. It has features of being compact, simple to handle and stable in holding.
● The YMH-1 is for general dial gauges.



YMH-1
(Dial Gauge is not furnished)
● Magnetic Power 10kgs

Examples (YMH-1)



Measurement surface in parallel direction | High surface in parallel direction | Low surface in parallel direction | Measurement at various angles in parallel directions | Measurement surface in vertical direction

Specifications

Model	Base (mm)			Magnetic power (kgs)	Suitable indicators
	Width	Length	Height		
YMH-1	37	100	18	10	For general dial gauges

MEMO

SECTION 10

Signal Indicators

- Signal Gauges
- Signal Checker
- Signal Gauge Set-Up
- Signal Gauge Connections Diaglam

Signal Gauges/Signal Checker

0.001mm, 0.01mm and 0.05mm Type

S-5
- With its high resolution of 0.001mm scale, it is most suitable for judgement of the values measured on finished parts with high accuracy.

S-7
- With its resolution of 0.01mm scale, it is generally used. Its pointer is in an anti-shock structure so as to give stable discriminating signals.

S-9
- With its most gross scale of 0.05mm, it is applicable to select grossly worked parts and as cast parts at the low-est costs.

SC-2A
- Once its tolerance is set, a dial gauge is dismounted before using it so that its endurance is really improved. With its large tolerance setting range of 3mm, it is most suitable for judgement of the measured values in a wide tolerance range.

S-5

Graduation: 0.001mm
Measurement range: 0.1(±0.05)mm

S-7

Graduation: 0.01mm
Measurement range: 1.0(±0.5)mm

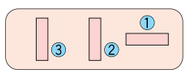
S-9

Graduation: 0.05mm
Measurement range: 3.0(±1.5)mm

SC-2A

Measurement range: 3mm

Specifications

Model	S-5	S-7	S-9	SC-2A
Spindle Movable Range	3mm	3mm	4mm	10mm
Graduation	0.001mm	0.01mm	0.05mm	※ In SC-2A type, the minimum readable value depends on a dial gauge to be attached.
Tolerance Setting Range	0.1 (±0.05) mm	1.0 (±0.5) mm	3.0 (±1.5) mm	3mm
Accuracy	±0.002mm	±0.005mm	±0.025mm	±0.005mm
Measuring Force	Less than 1.2N (120gf)			
Contact capacity	MAX DC24V 20mA			
Number of judgement Stages	Three stages of −NG, OK and +NG			
Cord length	2m			
Contact point	X-2			
Stem diameter	$\phi 8\ ^{0}_{-0.03}$mm			
Operating temperature range	0～60°C			
Options	Code Length 5m 10m ／ Back cover with Lug (GB-1A)			Code Length 5m 10m
Dial indicator for setting	———			Model 107F, 5F
Weight	180g			150g
Cable signal table				

S-5, S-7, S-9

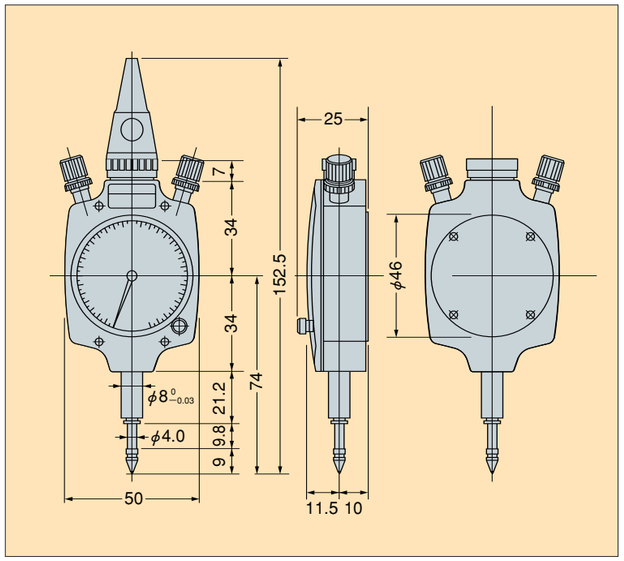
① ···COM (blue) black — −NG with ① and ② at ON
② ···−NG (red) — +NG with ① and ③ at ON
③ ···+NG (white) — OK with ①, ②, and ③ at OFF

SC-2A

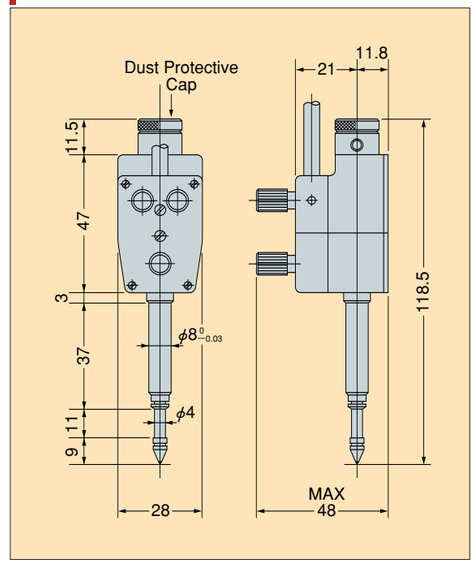
① ···COM (blue) black — −NG with ①, ②, and ③ at OFF
② ···OK (red) — OK with ① and ② at ON
③ ···+NG (white) — +NG with ①, ②, and ③ at ON

Caution	● When the current of 10 to 20 mA is used to drive a photocoupler,etc.,the contact may be worn a little earlier. ●In SC-2A type, the COM terminal is body-grounded (If leak current is found in other devices, put a gauge into floating status before mounting it). ● In SC-2A type, a spindle can be set in a range from its free status to 3mm. Although it may be movable in excess of this limit, you cannot set it in such an excessive level in order to protect the spindle. ● In SC-2A type, when a dial gauge is dismounted after setting the tolerance, never forget to mount a dust protective cap.

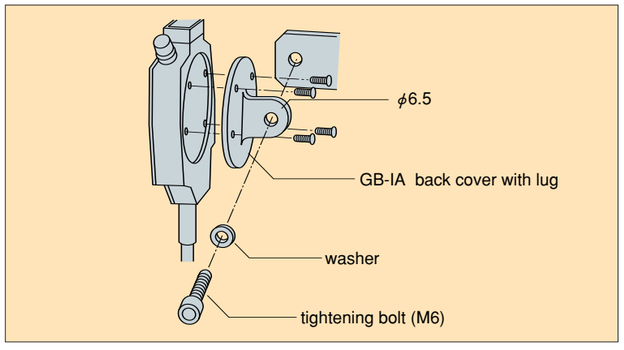
Outer Dimension S-5, S-7 & S-9



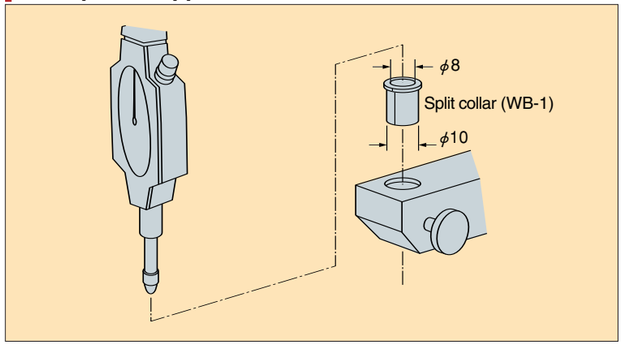
Outer Dimension SC-2A



GB-1A Example of mounted back cover with lug (option)



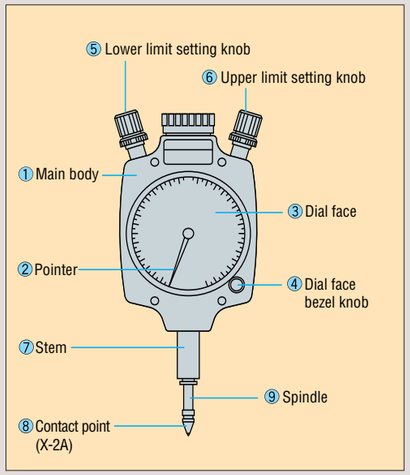
Example of supported stem



Signal Gauge Set-Up

How to Use

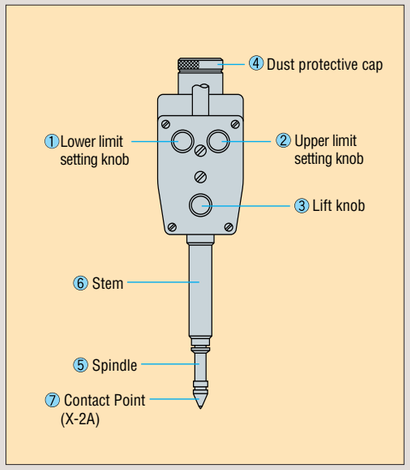
Signal Gauge (S-5, S-7, S-9)



Instructions

a. Prepare a judgement master (standard sample) and hold a signal gauge on a stand, etc.
b. Adjust and fix the position of judgement master so that a gauge pointer indicates zero, and move the contact point ⑧ up and down several times so as to confirm the pointer's stable position.
c. When setting a lower limit of tolerance value, remove the master and turn the lower limit setting knob ⑤ so as to adjust a pointer at a certain graduation.
d. When setting an upper limit of tolerance value, turn the upper limit setting knob ⑥ so as to adjust a pointer at a certain graduation while fully pushing up the contact point ⑧.
e. After setting the upper and lower limit, move the spindle ⑨ up and down serveral times to confirm that a pointer's indication is within the tolerance value.
※ Stem or back cover with lug is used to support the gauge.

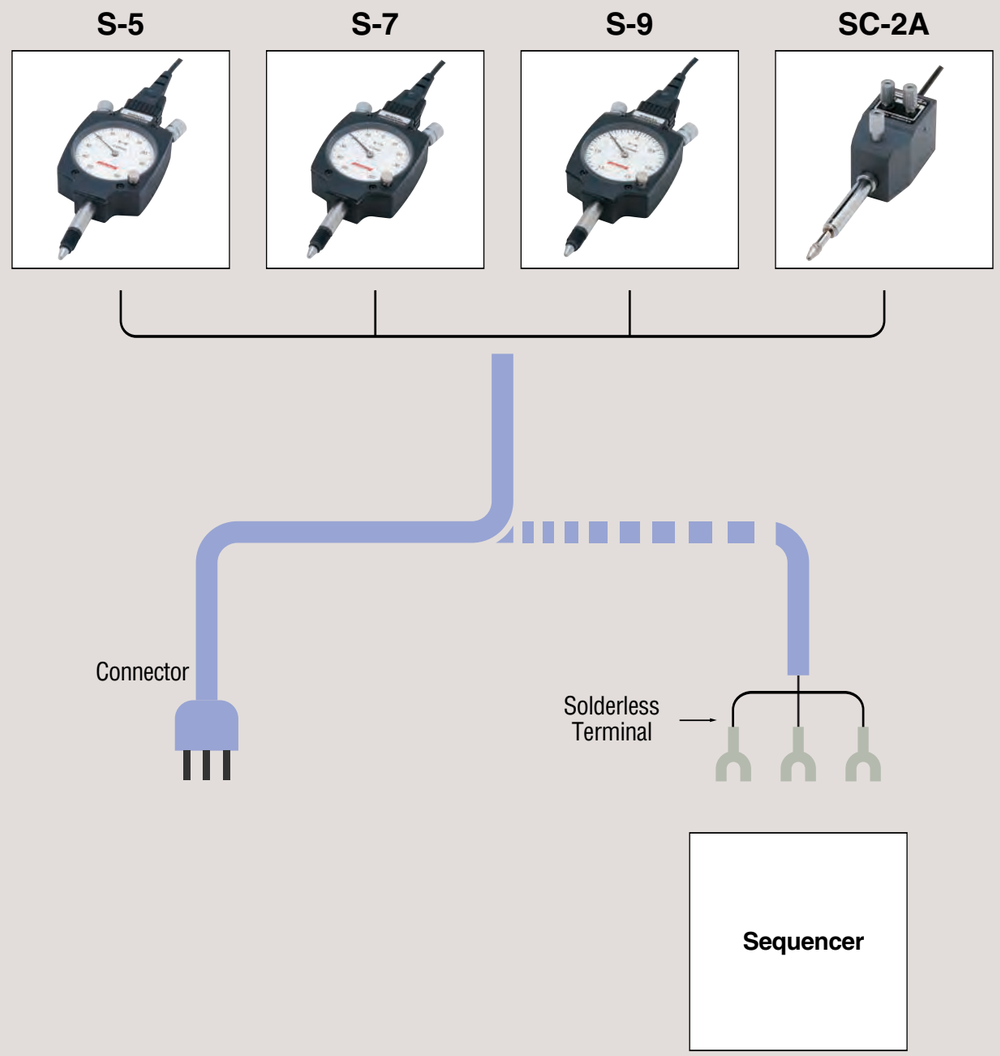
Signal Checker (SC-2A)



Instructions

a. Prepare a judgement master (standard sample) and hold a signal gauge on a stand, etc.
b. Prepara a dial gauge for setting tolerance value No.107 (0.01mm to 10mm) and remove the dust protective cap ④ by a hexagon wrench attached to the gauge.
c. Turning the lift knob ③ allows the spindle ⑤ to move up and down. The pointer of dial gauge moves according to its movement.
d. Connect this checker with a signal box or a controller.
e. Prepare a judgement master (standard sample),on which push this checker to the position where the lower limit of tolerance value can be set, and fix it by a supporting device.
f. Set the indicator of dial gauge at zero of a dial and turn the lower limit setting knob ① fully in the clockwise direction.
g. Set the upper limit of tolerance value at a certain position while turning the lift knob ③ in the clockwise direction.
h. Turn the upper limit setting knob ② in order to adjust the indications (signals) of signal box or controller to the switching position of OK and ＋NG at the upper limit of tolerance value.
i. Remove the master and turn the lift knob ③ in the counter clockwise direction to set the lower limit of tolerance value.
j. Turn the lower limit setting knob ① to adjust the indications (signals) of signal box or controller to the switching position of OK and －NG at the lower limit of tolerance value.
k. Move the spindle ⑤ up and down several times by the lift knob ③ to check the right adjustment.
l. After your setting, turn the lift knob ③ in the counter clockwise direction until the spindle ⑤ is fully pushed down.
m. When you use this checker without dial gauge, never forget to mount the dust protective cap ④ on it.
※ Stem is used to support this checker.

Signal Gauge Connections Diagram



MEMO

SECTION 11

Digital Indicators

- Digital Gauge
- Linear Gauge
- Digital Counter
- Deep Hole Bore Gauge
- Technical Glossary

Overview of Digital Gauges & Display Combinations

Measureing range \ Resolution	0.001mm (0.01m)	0.01mm	0.001mm
2mm	–	**DL-2** (Lever Type) 	**DL-2S** (Lever Type) 
5mm	–	**D-5** 	**D-5S** 
10mm (12.5mm) (25mm)	**DGN-255** **DGN-257** (0.01mm) **DGN-125** (Convertible to 0.01mm) 	**D-10** **DN-10** 	**D-10S** **DN-10S** 
20mm	**PDN-21** 0.001mm (Convertible to 0.01mm) 	**D-20** **DN-20** 	**D-20S** **DN-20S** 
50mm	**PDN-51** 0.001mm (Convertible to 0.01mm) 	**D-50** **D-50HT** 	**D-50S** 
100mm	–	**D-100** 	**D-100S** 
Counter	–	**C-500**  **C-700**  ※Connect with Personal Computer by RS-232C Cable + IF-21B (Option)	

Digital Gauges

Integrated Display Type

PDN-21

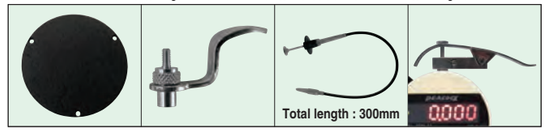
Resolution: 0.001mm (convertible to 0.01mm)
Range: 0~20mm

PDN-51

Resolution: 0.001mm (convertible to 0.01mm)
Range: 0~50mm

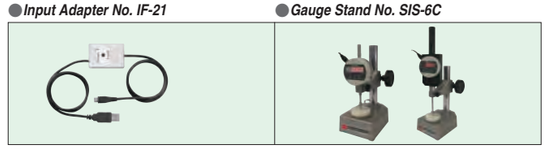
Options (for PDN-21)

●*Flat Back No. GB-3D20* ●*Finger Lever No. LL-D20* ●*Release No. RE-4* ●*Lifting Lever No. LL-PD*



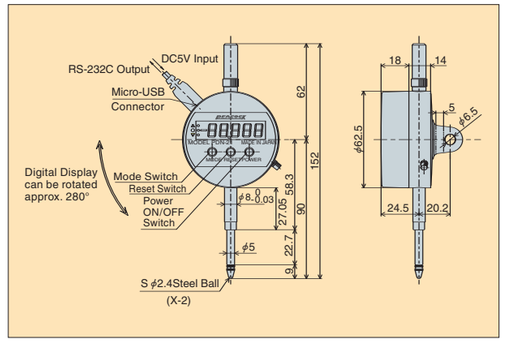
Options (for PDN-21 and PDN-51)

●*Input Adapter No. IF-21* ●*Gauge Stand No. SIS-6C*



IF-21 can input a measuring data directly to a cell of the spreadsheet such as EXCEL by converting the keyboard signal. The driver is unnecessary as USB terminal connection.

Dimensions (PDN-21 PDN-CC PDN-PP)



Specifications

Model	PDN-21	PDN-51
Range	20mm	50mm
Resolution	Convertible 0.01mm and 0.001mm (Set 0.001mm at the time of shipment)	
Accuracy (excluding quantized error)	0.001mm Display: 0.003mm 0.01mm Display: 0.01mm	0.001mm Display: 0.004mm 0.01mm Display: 0.01mm
Measuring force	Less than 1.5N (Without Spring: less than 0.31N)	Less than 3.0N (Without Spring: less than 1.0N)
Response speed	1000mm / sec.	
Contact Point	X-2 (M2.5 x 0.45)	X-9 (M2.5 x 0.45)
Display rotation	280°	
Power Supply	AC100 - 240 V±10% 50/60Hz (AC Adapter)	
Operating temperature	0~40℃ (no condensation)	
Accessories	●AC Adapter	●AC Adapter ●Finger Lever No. LL-D50
Functions	PDN-21 and PDN-51 ●Convertible 0.01mm and 0.001mm ●Judgement: Three Stage of -NG, OK and +NG (OK : Green, +NG : Red, -NG : Red) ●Counting Direction Conversion	
Data Output	RS-232C	
Options	for PDN-21 ●Flat Back No. GB-3D20 ●Finger Lever No. LL-D20 ●Release No. RE-4 ●Lifting Lever No. LL-PD	
	for PDN-21 and PDN-51 ●Input Adapter No. IF-21	

Digital Gauges

New

Cordless Type

- The batteries in these digital gauges have a service life of approximately 3000 hours under normal use.
- Digital display can be rotated (approx. 270°) to easily legible positions.
- Very compact, and long 25mm stroke. (DGN-255, DGN-257)
- RS-232C data output capability.
- No warm-up required. Switch on, and it's immediately ready to use.
- Clear LCD display.

DGN-255

Range:	25mm
Resolution:	0.001mm

DGN-257

Range:	25mm
Resolution:	0.01mm

DGN-125

Range:	12.5mm
Resolution:	0.001 / 0.01mm Switchable
Min, Max, Delta function etc.	

Specifications

Type	Simple type		Multifunction type	
Model No.	DGN-255	DGN-257	DGN-125	DGN-125B
Range	25mm	25mm	12.5mm	
Resolution	0.001mm	0.01mm	0.001/0.01mm Switchable	
Indicator error (*excluding quantized error)	0.003mm	0.01mm	0.003mm	
Display (mm)	6 digit 999.999 with (–symbol)	6 digit 9999.99 with (–symbol)	6 digit 999.999 with (–symbol)	
Measuring force (upright position)	Less than 1.2N		Less than 1.0N	
Mounting method	Supported by ϕ8mm Stem, (Lug back No. GB-1DX is optional)			
Contact Point	SR2.0mm with Steel ball M2.5 x 0.45 L=7mm No.X-14			
Operating temperature	+5°C to +40°C			
Common Specifications	● Battery	CR-2032		
	● Data Output	RS-232C (by cable KB-232C or KB-USB)		
	● Change Polality	Pushing up the Spindle		
	● Change Unit	mm/inch		
	● Low Battery	Light up "B"		
	● Display rotatable	Max 270°		
	● Power Saving	Automatic Switch off		
for only DGN-125, DGN-125B	★ Minimum Value	Hold the Minimum Value (Min)		
	★ Maximum Value	Hold the Maximum Value (Max)		
	★ Measurement Value	0.001mm/0.01mm Selectable		
	★ Min + Max	Hold the Minimum Value + Maximum Value (Delta)		
	★ Multiplication Display	Calcurated Display at set multiple (Mult)		
	★ Judgement	LED display -NG OK+NG (Tol)		
Options	◆ Spindle Pull-up	Lifting Lever (LL-205), Finger Lever (LL-D20), Release (RE-205)		
	◆ Back with Lug	Mounting Vertical /Horizontal direction (GB-1DX) hole ϕ6.5mm		
	◆ Contact Point	All the replaceable Contact Point for Dial Gauges can be installed		
	◆ Signal Cable	RS-232C Cable (KB-232C), USB Cable (KB-USB)		
	◆ Input Adapter	A Data input to EXCEL (IF-21B)		
for only DGN-125B	★ Wireless communications	Bluetooth 4.0 type, Working distance is within 5m. System requirements Windows 10 uploaded		

SINCE 1916 PEACOCK
11

Digital Gauges

Optional accessories

Lifting Lever
LL-205

Release
RE-205

Finger Lever
LL-D20

Lug Back
GB-1DX

USB Cable
KB-USB

Foot Switch
SW-1

Battery
CR2032

Data Communication

Cable and Input Adapter (Option)

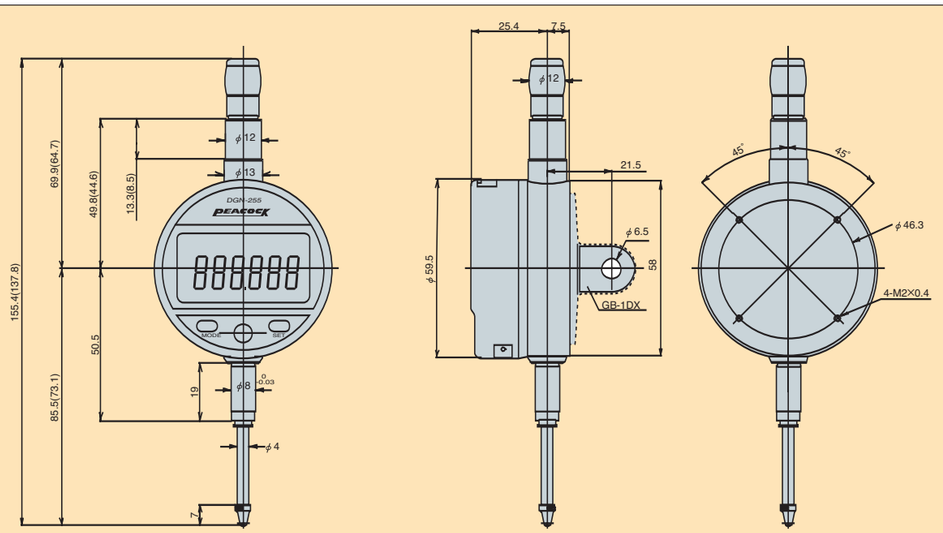
RS-232C Cable
KB-232C

+

Input Adapter
IF-21B

IF-21B with KB-232C can transfer a data to a spredsheet such as EXCEL of your PC

Dimensions (DGN-255 DGN-257)



( ) indicates DGN-125

New

G2N-255

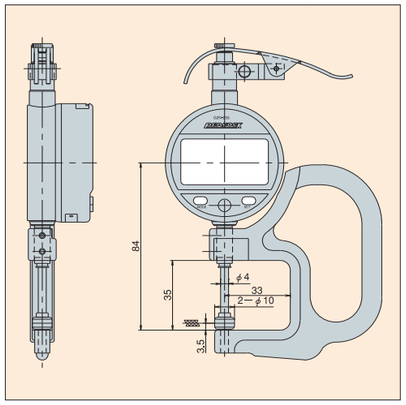
Range:	**20mm**
Resolution:	**0.001mm**

Specifications

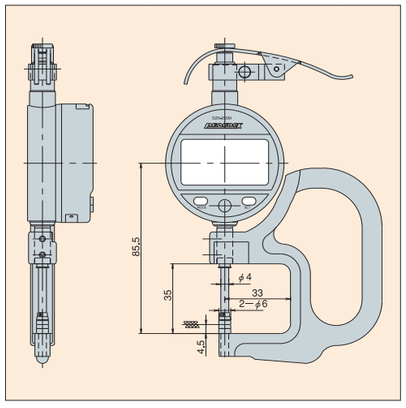
MODEL	G2N-255	G2N-255M	G2N-257	G2N-257M
Digital Gauge	DGN-255	DGN-255	DGN-257	DGN-257
Contact Point / Anvil	ϕ10mm	ϕ6mm	ϕ10mm	ϕ6mm
Contact Point Parallelism	less than 5μm		less than 10μm	
Resolution	0.001mm		0.01mm	
Accuracy (excluding quantized error)	±0.008mm		±0.02mm	
Measuring range	0-20mm			
Measuring force	less than 1.2N			
Measuring depth	33mm			

Dimensions (G2N-255 G2N-257)

Dimensions (G2N-255／G2N-257)



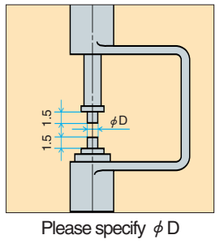
Dimensions (G2N-255M／G2N-257M)



Dial Thickness Gauge (Special Order)

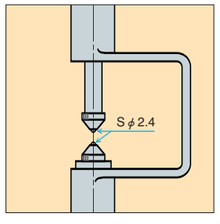
For different Aplications, the shape of the contact point and anvil can be special ordered.

Both Contact Point and Anvil needle type

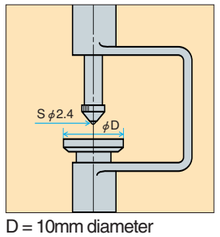


Please specify ϕ D

Both Contact Point and Anvil ball type

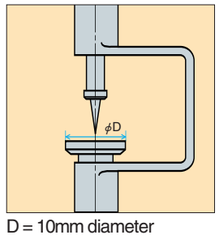


Ball type Contact Point and Flat type Anvil.



D = 10mm diameter
(also available in ϕ 20, 25 and 30mm)

Needle type Contact Point and Flat type Anvil.



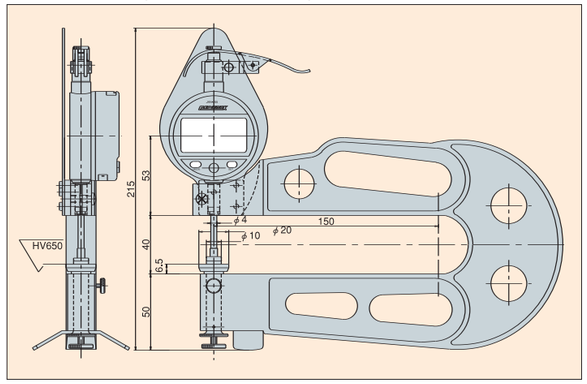
D = 10mm diameter
(also available in ϕ 20, 25 and 30mm)

New

JAN-255

Range:	**20mm**
Resolution:	**0.001mm**

Dimensions (JAN-255／JAN-257)



Specifications

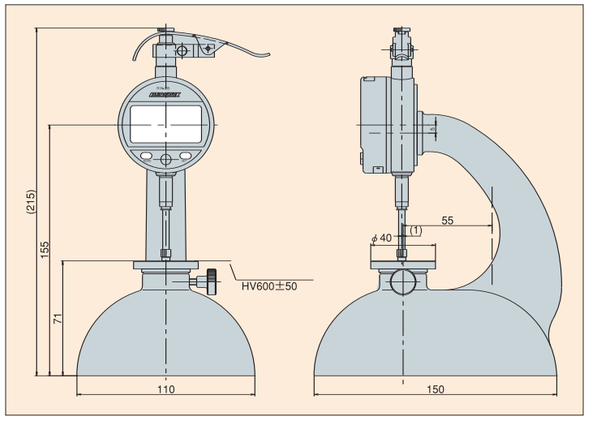
MODEL	JAN-255	JAN-257
Digital Gauge	DGN-255	DGN-257
Resolution	0.001mm	0.01mm
Accuracy (excluding quantized error)	±0.01mm	±0.02mm
Contact Point Parallelism	less than 5μm	less than 10μm
Measuring range	0-20mm	
Measuring force	less than 1.2N	
Measuring depth	150mm	
Contact Point / Anvil	ϕ10mm /ϕ20mm	

Digital Upright Gauges

R1N-255

Range:	**0-20mm**
Resolution:	**0.001mm**

Dimensions (R1N-255／R1N-257)



Specifications

MODEL	R1N-255	R1N-257
Digital Gauge	DGN-255	DGN-257
Resolution	0.001mm	0.01mm
Accuracy (excluding quantized error)	±0.004mm	±0.02mm
Measuring range	0-20mm	
Measuring force	less than 1.2N	
Measuring depth	55mm	
Contact Point / Anvil	ϕ5mm (SUS) /ϕ40mm (Ceramic)	

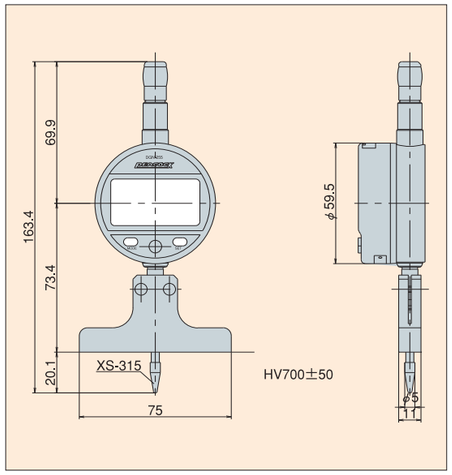
Digital Depth Gauges

New

T2N-255W

Range:	20mm
Resolution:	0.001mm

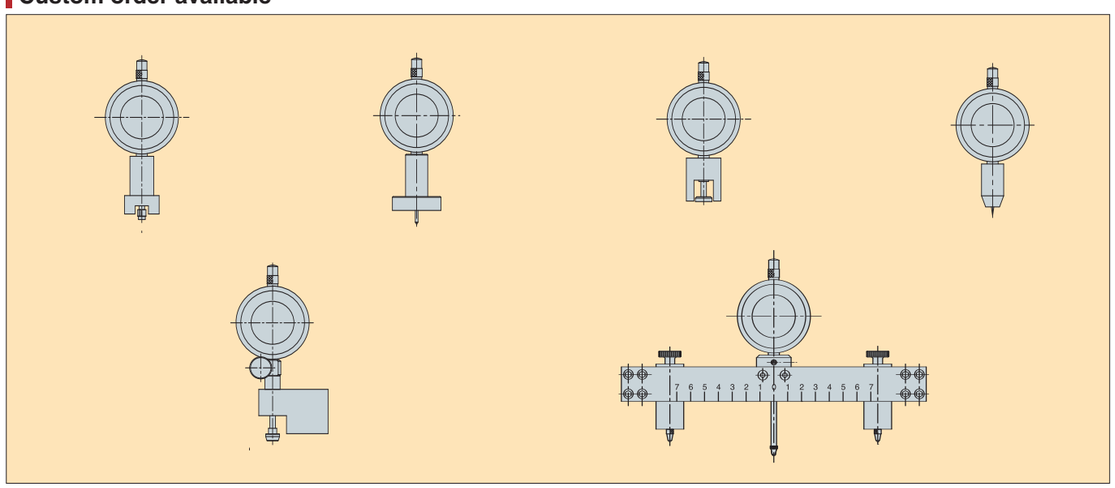
Dimensions (T2N-255W／T2N-257W)



Specifications

MODEL	T2N-255W	T2N-257W
Digital Gauge	DGN-255	DGN-257
Resolution	0.001mm	0.01mm
Accuracy (excluding quantized error)	±0.004mm	±0.02mm
Measuring range	0-20mm	
Base (L x W)	75mm x 11mm	
Base Parallelism	less than 5μm	
Contact Point	XS-315 Spherical type (SR1)	

Custom order available



Linear Gauges

Measurement range(0~5mm)

Lever Type

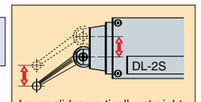
● Best suited for deviation measurement.

DL-2

Resolution:	0.01mm
Range:	0~2mm

DL-2S

Resolution:	0.001mm
Range:	0~2mm



Lever slides vertically, straight up and down, as shown, (to eliminate error caused by arc operation.)

Pencil Type

● Best suited for confined conditions.

D-5

Resolution:	0.01mm
Range:	0~5mm

D-5S

Resolution:	0.001mm
Range:	0~5mm

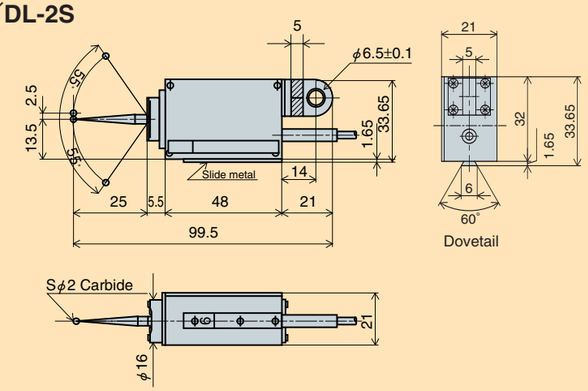
Specifications

Model	DL-2	DL-2S	D-5	D-5S
Range	※ 2mm		5mm	
Resolution	0.01mm	0.001mm	0.01mm	0.001mm
Accuracy (excluding quantized error)	0.01mm	0.002mm	0.005mm	0.002mm
Measuring force	Less than 0.6N		Less than 0.5N	
Mounting method	ϕ6.5mm hole on lug or dovetail at bottom		ϕ8mm stem	
Contact point	S ϕ2mm carbide		S ϕ2.4mm steel (X-2)	
Weight	180g		160g	
Cable length	2m (Standard) Option ● Extention cables of 2, 3, 5 and 10 meters are available (see page P.143)			
Operating temperature	0~40°C			
Output signal	90° phase difference, 20μm pitch (R03-PB8M Tajimi connector)			
Featuares	● Lever type probe is best recommended for measuring TIR or narrow space. ● Contact point easy adjustable to any desired position.		● Pencil type is especially made for setting up in extremely confined conditions. ● Dust proof rubber attached. Gauge suitable for use in dusty and moist environment.	
Compatible standard counters	C-500 C-700			
Options	———		● Customer must specify if application is up-side-down. The measuring force changes when the gauge is inverted.	

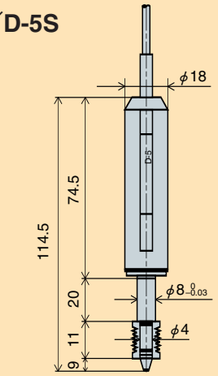
※ Lever moves linearly, unlike the arc movement in a lever type dial indicator.

Dimensions

DL-2／DL-2S

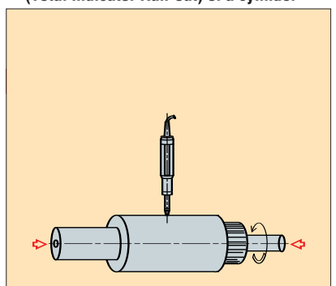


D-5／D-5S

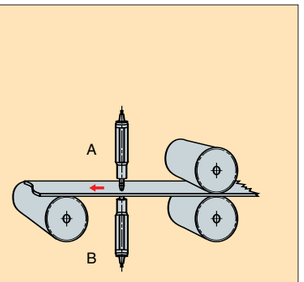


Examples

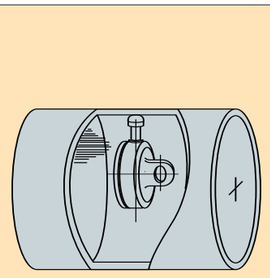
● Testing TIR
(Total Indicator Run-out) of a cylinder



● Multi-point testing of a thick board

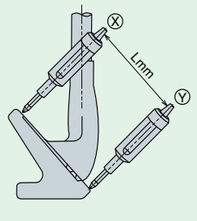


● Internal surface measurement of a cylinder



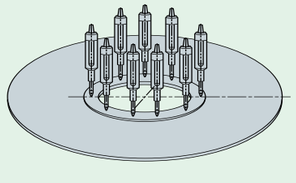
● Measuring Angles

Gauges are set at position X and Y and the difference between them is converted into angle for judgement.
(In this example, the loft angle of a golf club is measured and printed out)



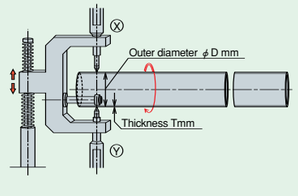
● Multi-Point Measuring

Mount the same number of linear gauges to measure the numbers of points where measurement is needed.
Measured data is processed by a multi-counter with CPU and printed out on a printer.



● Measuring Glass Tubes

Outer diameter, thickness, and thickness variation of glass tubes such as fluorescent tubes are measured and displayed. Built-in printer prints out the measured data.



※Features
DN-10 DN-10S DN-20 DN-20S
●1 Recommended for locations where cable extension (10 to 50 meters) is necessary.
●2 Recommended for use in electrically noisy environments.
Notes of wiring : A signal wire should be duct wiring apart from other power lines.

Measurement range (0~10mm, 0~20mm)

- 10mm and 20mm measurement ranges are the easiest to use.
- Used in conjunction with digital counters, these gauges can be set up in places where dial gauges are now being used.
- Set the gauge by either stem or lug back.
- For lifting spindle, both lever and release types are available.

Rectangular wave output type

DN-10・DN-10S・DN-20・DN-20S

- For use in electrically noisy environments.
- For applications requiring extra long cables.(10 to 50 meters are available)

D-10

Resolution:	0.01mm
Range:	0~10mm

D-10S

Resolution:	0.001mm
Range:	0~10mm

DN-10 New

Resolution:	0.01mm
Range:	0~10mm

DN-10S New

Resolution:	0.001mm
Range:	0~10mm

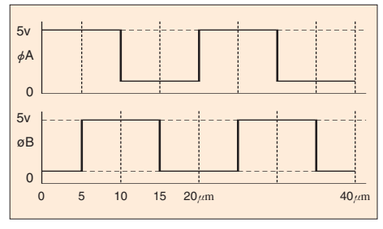
DN-20 New

Resolution:	0.01mm
Range:	0~20mm

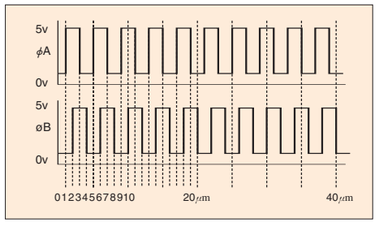
DN-20S New

Resolution:	0.001mm
Range:	0~20mm

Output wave-form（DN-10・DN-20）



Output wave-form（DN-10S・DN-20S）

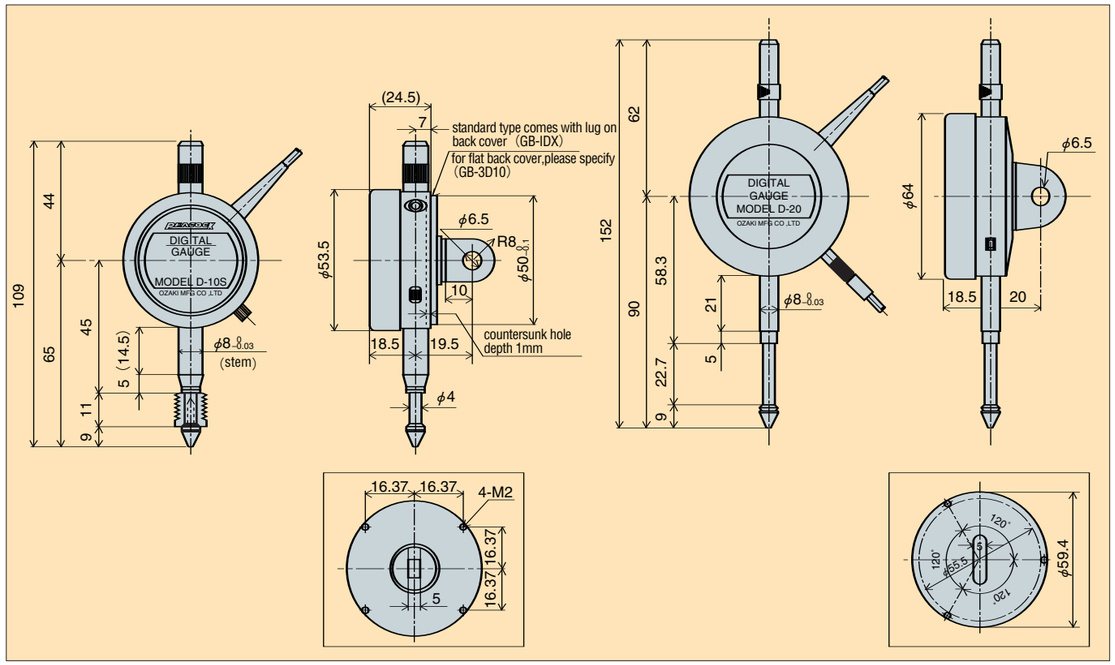


Specifications

Model	D-10	D-10S	DN-10 New	DN-10S New	D-20	D-20S	DN-20 New	DN-20S New
Range	10mm				20mm			
Resolution	0.01mm	0.001mm	0.01mm	0.001mm	0.01mm	0.001mm	0.01mm	0.001mm
Accuracy (excluding quantized error)	0.005mm	0.002mm	0.01mm	0.002mm	0.005mm	0.003mm	0.01mm	0.003mm
Measuring force	Less than 1.0N				Less than 1.5N			
Cable length	2m							
Mounting method	φ 8mm stem or 6.5mm hole on lug back							
Contact point	M2.5 × 0.45 S φ 2.4mm steel (X-2)							
Operating temperature	0~40°C							
Weight	220g				300g			
Output Signal	90° phase difference, 20μm pitch (R03-PB8M Tajimi connector) Rectangular wave (Low-0V High=8V)							
Compatible standard counters	C-500 C-700							
Options	● Release (RE-4) Lifting lever (LL-1) ● Dust proof rubber (BG-10) ● Flat back (GB3-D10), screws (S-110) ● Customer must specify if application is up-side-down. The measuring force changes when the gauge is inverted.				● Release (RE-4) ● Flat back (GB3-D20) ● Customer must specify if application is up-side-down. The measuring force changes when the gauge is inverted.			

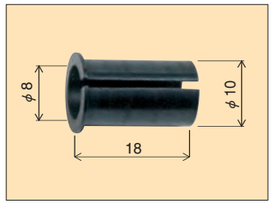
※Features
DN-10 DN-10S DN-20 DN-20S
●1 Recommended for locations where cable extension (10 to 50 meters) is necessary.
●2 Recommended for use in electrically noisy environments.
Notes of wiring : A signal wire should be duct wiring apart from other power lines.

Dimensions (D-10／D-10S／D-20／D-20S／DN-10／DN-10S／DN-20／DN-20S)



Optional accessories

Split collar (WB-1)

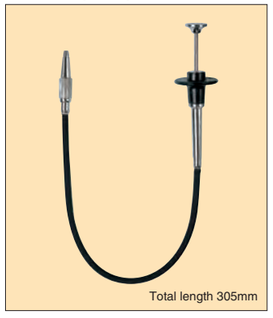


Split collar above is used on the ϕ8mm stem during mounting to prevent malfunction due over tightening.
Securing by means of screw directly in stem may result in malfunction.

Dust proof rubber (BG-10)

Compressible dust proof rubber fits all D-5, D-5S, D-10S, DN-10, DN-10S gauges.
(Stroke under 10mm)

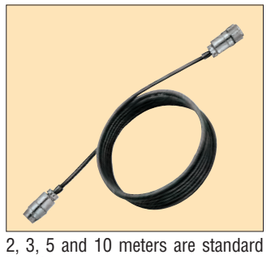
Release (RE-4)



Total length 305mm

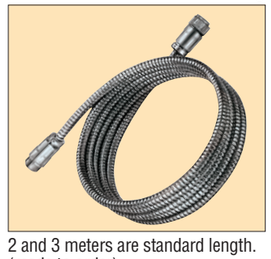
Lifting lever (LL-1)

Extension Cable



2, 3, 5 and 10 meters are standard length.

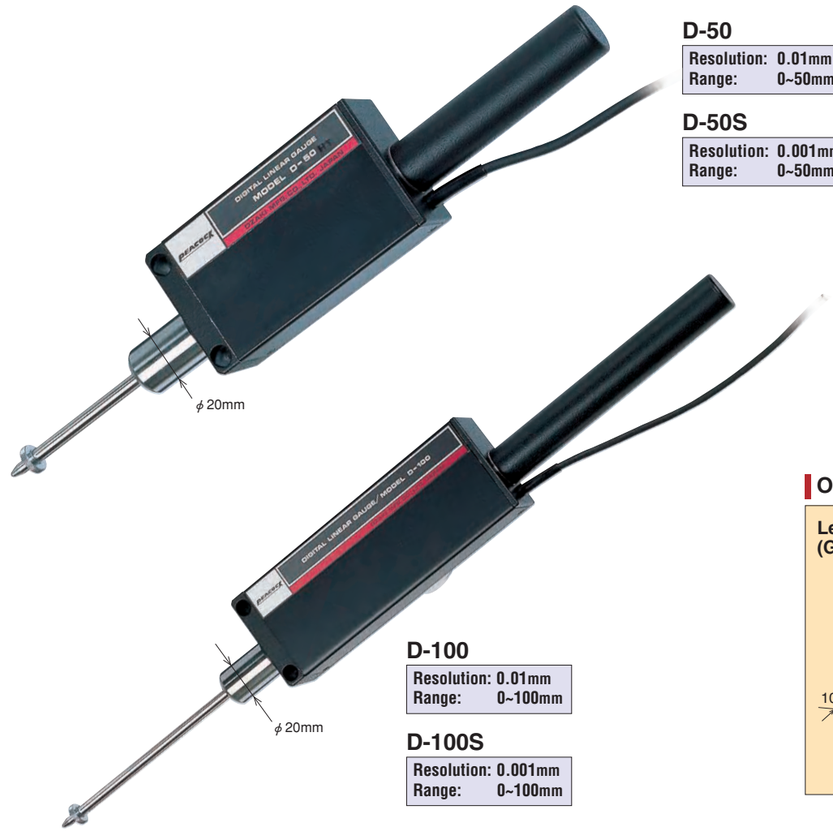
Extension cable with metal sheathing



2 and 3 meters are standard length.
(made to order)

Measurement Range (0～50mm, 0～100mm)

- With very sturdy ϕ20mm stem.
- Ultra-high precision achievable with exclusive gauge stand (PDS-2)



D-50

Resolution:	0.01mm
Range:	0~50mm

D-50S

Resolution:	0.001mm
Range:	0~50mm

D-100

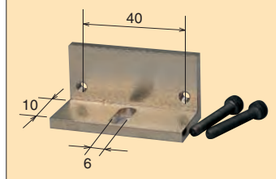
Resolution:	0.01mm
Range:	0~100mm

D-100S

Resolution:	0.001mm
Range:	0~100mm

Option

Level mounting clamp (GB-50)



Specifications

Model	D-50	D-50S	D-100	D-100S
Range	50mm		100mm	
Resolution	0.01mm	0.001mm	0.01mm	0.001mm
Accuracy (excluding quantized error)	0.01mm	0.004mm	0.01mm	0.005mm
Measuring force	Less than 3.0N		Less than 3.5N	
Cable length	2m			
Mounting method	ϕ20mm stem or fastening by M4 screws at two positions			
Contact point	M2.5 × 0.45 S ϕ2.4mm steel (X-9)			
Operating temperature	0~40°C			
Weight	450g		520g	
Output signal	90° phase difference, 20μm pitch (R03-PB8M Tajimi connector)			
Compatible standard counters	C-500 C-700			
Accessories	● Finger lever for lifting spindle (LL-D50) ·····1 pc			
Features	● If Spindle inner spring is removed, measuring force will be that of spindle itself (only when in upright position) ● D-50, D-50S ·····1.0N (100gf) D-100, D-100S ·····1.1N (110gf) ● Recommended Gauge stand is PDS-2			
Option	● Level mounting clamp (GB-50) see page 141 ● Customer must specify if application is up-side-down. The measuring force changes when the gauge is inverted.			

Special Gauges

For High Temperature Applications D-50HT (0.01mm Resolition)

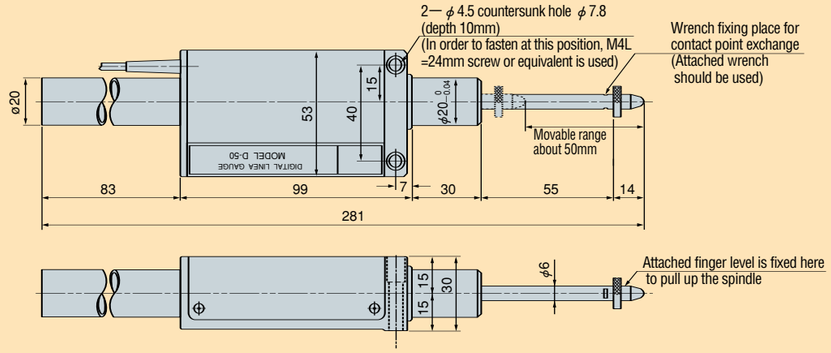
This special gauge can be used up to +65°C temperature.
0.01mm (0.005mm) Resolution
(D-50S is not suited for high temperature)

For Dusty Applications D-50WA D-50SWA

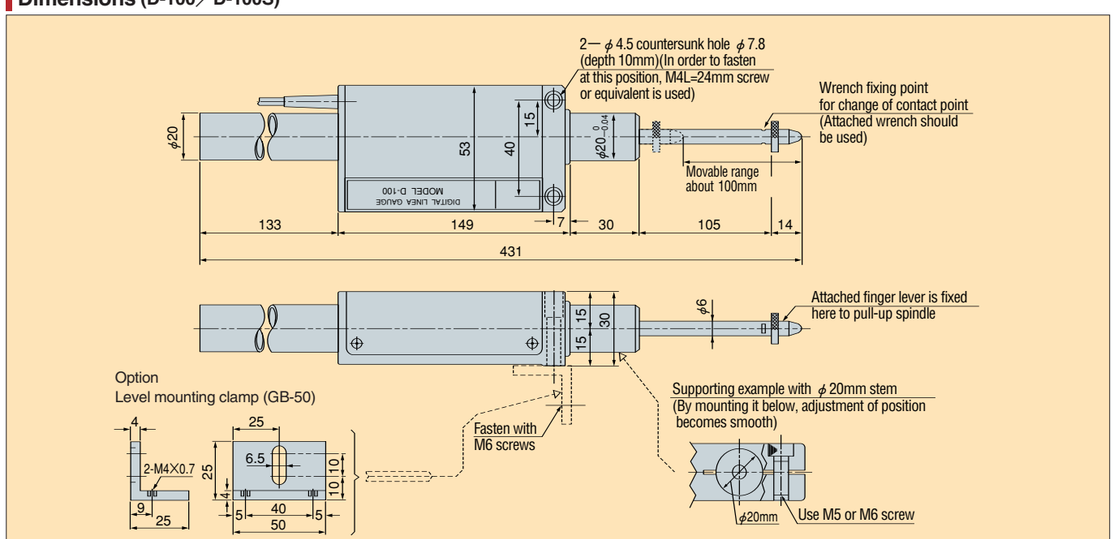
Dust-proof rubber protects spindle. Equivalent to IP-54. (Protection against oil & water is not available)

For Dusty Applications D-100WA D-100SWA

Dimensions (D-50／D-50S／D-50HT)



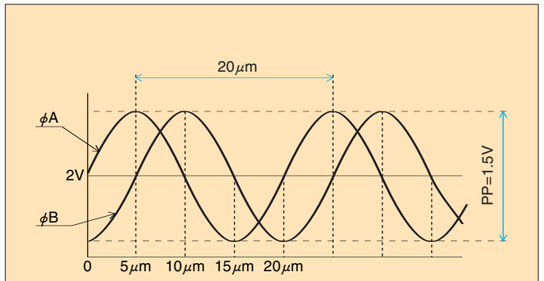
Dimensions (D-100／D-100S)



Common Specifications of Linear Gauges

Items		Common specifications
Type of gauges	Output signal (A)	DL-2S, D-5S, D-10S, D-20S, D-50S, D-100S
	Output signal (B)	DL-2, D-5, D-10, D-20, D-50, D-100, D-5UZ
Displacement transducer type		Glass linear scale (scale pitch 20μm) (D-10SS・D-10HS: pitch 8μm)
Power supply		+12DCV ±5% (consumed current 40mA)
Signal cable length		2m (2,3,5 and 10m extension cables are available) 4 core shied cable & oil proof type
Output connector, Receiver connector		Gauge side (R03-PB8M) Counter side (R03-R8F) Tajimi connectors
Output signal (A) 1μm resolution		2 phase signal with 90° phase difference, 20μm pitch, sinusoidal wave-form
Output signal (B) 5μm／10μm resolution		2 phase signal with 90° phase difference, 20μm pitch, approximate sinusoidal wave-form
Output signal (C) 5μm／10μm resolution		2 phase signal with 90° phase difference, 20μm pitch, square wave-form (gauges: DN-10, DN-20)
Operating temperature		0~40°C (except for high temperature type)
Output Frequency		0~50KHz
Contact point		M2.5 x 0.45 (contact points for dial gauge can be used)

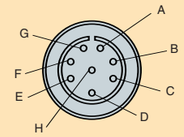
Output signal (A) wave-form (1μm resolution)



After multiplying 1μm pulse by 5 where 1μm = 1 generated pulse.

Signal Connector R03-PB8M (manufactured by Tajimi)

Pin arrangement



Pin No.	Signal	Wire Color
A	GND	black
B	ϕA	blue
C	+12V	red
D	ϕB	white
E	NC	unused
F	shielded wire (FG)	
G	NC	unused
H	NC	unused

Digital Counters

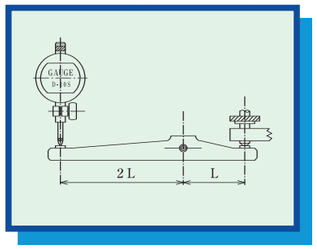
New Type

Equipped with large display functions and various measurement functions,our Digital Counters can be installed in a Control Panel or placed on a desk due to their compact designs.

Simple type
Priority on user friendliness.
C-500

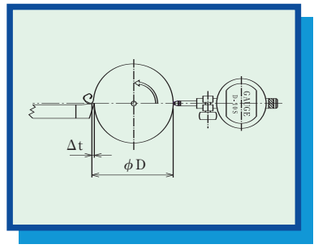
Multi-type
User friendliness combined with multi-functionality.
C-700

1/2 Display (C-500/C-700)



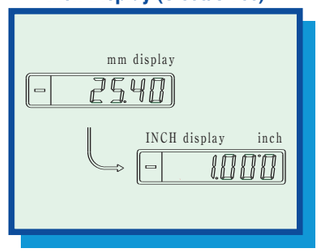
Displays the displacement after halving it.

×2 Display (C-500/C-700)



Displays the displacement after doubling it.

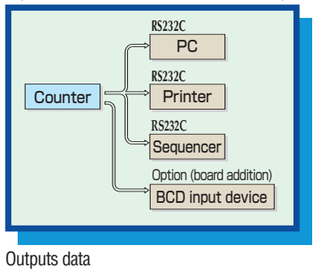
Inch Display (C-500/C-700)



Displays the displacement in terms of inches.

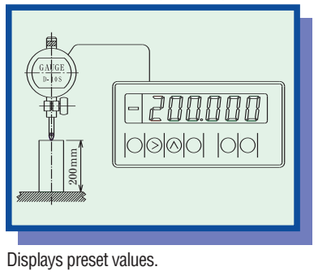
Data Output (C-500/C-700)

(Standard function of RS-232C, optional function of BCD)



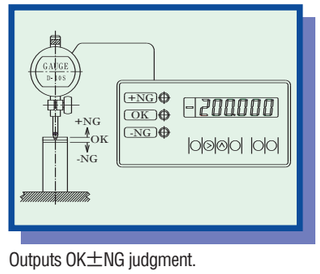
Outputs data

Presetting (C-700)



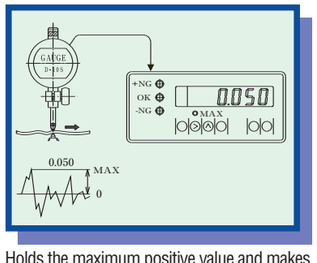
Displays preset values.

OK±NG Judgment (C-700)



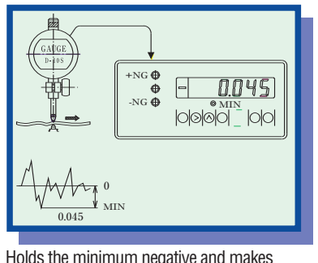
Outputs OK±NG judgment.

Maximum Value Display (C-700)



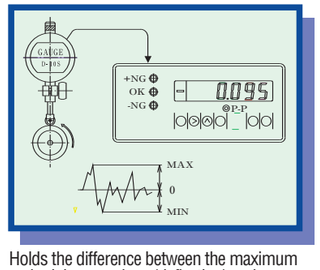
Holds the maximum positive value and makes OK±NG judgment.

Minimum Value Display (C-700)



Holds the minimum negative and makes OK±NG judgment.

Deflection Measurement Display (C-700)

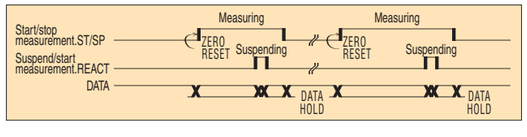


Holds the difference between the maximum and minimum values (deflection) and makes OK±NG judgment.

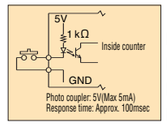
Specifications of Digital Counters

Model	Model No. C-500	Model No. C-700
Displayed digits ＊Selection of 10 μm ＊Selection of 1 μm Display	−9999.99～00.00～9999.99 −999.999～0.000～999.999 High-luminance LED display with 7segments (red)	
Power supply voltage & power consumption	AC100V～AC240V・9VA or lower	
Operating temperature	0～+40℃	
Compatible Linear Gauges Selection of 10 μm display Selection of 1 μm display	DL-2 D-5 D-10 D-20 D-50 D-100 DN-10 DN-20 DL-2S D-5S D-10S D-20S D-50S D-100S DN-10S DN-20S	
Accessories	◆AC power cord (2m): One cord ◆Metal fittings for panel installation: Two units (to be used for installation in panel and securing stand fittings) ◆Stand fittings: One unit (to be used when counter is used as desktop device)	
Terminal block functions (Rear panel)	◆Terminal block: Screwless terminal block ◆Usable electric cables: AWG22-28 ◆Length of peeled wire of cables: 8～9mm ◆Pin alignment ＊1 St/Sp Contorls "START" and "STOP" of MAX, MIN. P-P measurement mode. ＊2 React Controls "SUSPEND" and "START" of P-P measurement mode. 3 Latch Controls "LATCH" and "CANCEL" of measured value. 4 Reset External "RESET" "PRESET" (Function available only in Model No. C-700) 5 Alarm Error signal output ＊6 −NG Outputs -NG based on OK±NG judgment (red LED). ＊7 OK Outputs OK based on OK±NG judgment (green LED). ＊8 +NG Outputs +NG based on OK±NG judgment (orange LED). 9 GND GND (1):NG output in first stage (2):NG output in second stage ＊marked numbers indicate functions available only in Model No.C-700	Max Display: +NG (2) / OK / +NG (1) Min Display: −NG (1) / OK / −NG (2) P-P Display: NG (2) / OK / NG (1)
Dip sw setting functions (Printed circuit board)	Dip (1) SW 1 Select 1 μm or 10 μm SW 2 Select direction of counting. SW 3 Select activation or non activation of error output. SW 4 Select activation or non activation of overflow. Dip (2) SW 1 Settings by Manufacturer SW 2 Select whether or not to include default values for OK ±NG judgment. SW 3 Select either "orthogonal" or "sine" for input waveform. SW 4 Select either 400msec or 100msec for RESET time.	
Data output (RS-232C) D-Sub9P plug INCH screw Options ＊BCD output board	◆Pin Alignment 1 NC − 2 Rxd in← 3 Txd →out 4 NC − 5 SG − 6 NC − 7 RTS →out 8 CTS in← 9 NC − ◆Communication mode: Half-duplex asynchronous communication ◆Communication speed: 9600bps ◆Format: 7Bit ASCII ◆Parity: even number ◆Stop bit: 1Bit ◆RTS/CTS: Returned when not in use. ◆Reception command: Transmission request ASCII [T] [t] : Reset ASCII [R] [r] ◆Connection cables: Cross cables (not included) ◆CB-BCD Can not be used in combination with RS-232C output.	
Display functions	◆1/1 display: Displays the measured value as is. ◆1/2 display: Displays the measured value after halving it. ◆ ×2 display: Displays the measured value after doubling it. ◆INCH display: Displays the value after converting it into inches. Note: With 1 μm display and ×2 display, the lowest digit will be displayed as an even number.	
Presetting display function	◆Zero setting only	◆Can display preset values
Measurement mode function 「MAX」「MIN」「P-P」	———	◆Current value dispiay ◆Maximum value(Max) ◆Minimum value(Min) ◆Deflection(P-P) RESET action is taken by ST of the ST/SP control terminal.
OK±NG judgment function (Refer to terminal output circuit)	———	◆Current value mode: +NG OK −NG ◆Maximum value mode: OK +NG(1) +NG(2) ◆Minimum value mode: OK −NG(1) −NG(2) ◆Deflection mode: OK NG(1) NG(2)
Dimensions & weight	◆144(W)×72(H)×160(D)mm	◆950g

Time Chart [Model No.C-700]

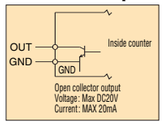


Control Terminal Input Circuit



Pin No.1 ST/SP
Pin No.2 REACT
Pin No.3 LATCH
Pin No.4 RESET

Terminal Output Circuit



Pin No.5 ALARM
Pin No.6 -NG
Pin No.7 OK
Pin No.8 +NG

Deep Hole Bore Gauge-EMCC Series

- The EMCC Series can easily measure the inside diameter of deep bore with high accuracy, which has been precision-machined.
- The EMCC Series advances a detector having an automatic alignment mechanism in line with the inside diameter.
- Measurement is possible up to the length of 10M by using an additional extension rod.

EMCC-3

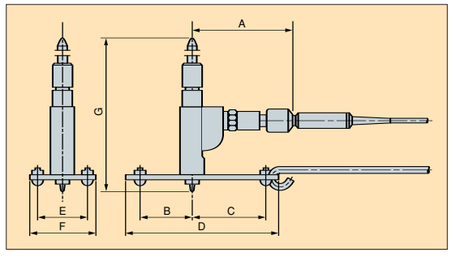
Compatible Counter C-500

Specifications

Model		EMCC-2	EMCC-3	EMCC-4	EMCC-5	EMCC-6
Measuring range (ID)		35 ~ 60mm	50 ~ 100mm	100 ~ 160mm	160 ~ 250mm	250 ~ 400mm
Measuring depth		70mm ~ 10M	90mm ~ 10M	120mm ~ 10M	130mm ~ 10M	150mm ~ 10M
Number of feeler		Intervals 5mm×6	Intervals 5mm×11	Intervals 10mm×7	Intervals 10mm×10	Intervals 10mm×16
Thickness of washers		1,2,3mm each		1,2,3,4mm each		
Contact Point		L=33mm (flat type)		L=44mm (flat type)		
Contact point's travel and measuring force		1.4mm / less than 2.0N				
Extension rods		EMCC-L (1 meter rod×10 rods = 10 meters) ·····sold separately				
Compatible linear gauges		● When Resolution is 10μm, use D-5B ● When Resolution is 1μm, use D-5SB				
Compatible counters		● C-500				
Operations		● Test completes only after receiving reference from a master and inserting the micrometer head through a workpiece. ● Automatic centering mechanism requires no manual "shaking" to center up the micrometer head.				
Functions		● Workpiece has to be horizontally level (No test can be performed with the workpiece perpendicular).				
Dimensions (mm)	A	70	71	77	77	77
	B	20	30	40	45	50
	C	30	40	55	60	70
	D	62	82	115	125	140
	E	15	20	38	58	88
	F	22	30	50	70	100
	G MIN	35	50	100	160	250
	G MAX	60	100	160	250	400

※ To make up a complete working unit, it requires an EMCC (2~6), an EMCC-L (extension rod set), a linear gauge and a counter.

Dimensions



Gauge Sensor

Model	D-5B	D-5SB
Resolution	0.01mm	0.001mm
Accuracy	0.01mm	0.002mm
Cable length	10 meters	
Screw pitch of Contact Point	M2.5 ×0.45	
Measuring force	Less than 0.5N	
Remarks	Specifications are according to D-5 D-5S	

Features

- **The inside diameter of extremely deep can be measured. (Max. 10M)**
  The inside diameter of the deep hole that was not able to be measured so far can be easily measured with our development of automatic brought to an center position and added to extension rods to the Linear Gauge..
- **High performance**
  It is possible to measure with high performance as our Linear gauge is used for the detector. (0.01mm, 0.001mm)
- **Easy operation**
  Due to our development of our automatic brought to an center position, the measurement operation is easier than a general inside diameter measuring instruments as only insert the cylinder detector in the hole of measurement work-piece.
- **Efficient measurement**
  Since the easy operation, it is efficient of the measurement for an inspection of the mass production.
- **Excellent indication stability**
  It is necessary to shakes the general cylinder gauge for reads a minimum measurement. However, our EMCC can get the excellent stability of the indication as only insert the detector to the hole of measurement work-piece.
- **Low measuring force**
  The work-piece is not so damaged as the measuring force of contact point is 2.0N compared with a general cylinder gauges (5.0~6.0N)
- **Data record**
  Digital counter have the RS-232C output so that the measuring data can be processed.

The main usage

Internal diameter measurement of extremely deep hole
Hydraulic Cylinder, Air Cylinder, Cylinder of Extruder, High accuracy Pipe, Mold for Pipe etc.

Extension Rods (1M x 10 pcs) as Optional

To insert or pull-out the detector to the hole of measurement work-piece.

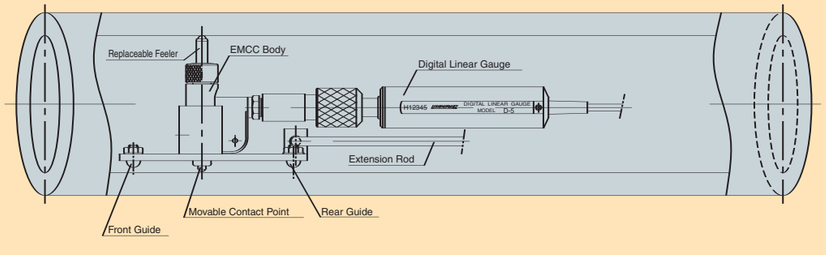
Display Counter

Data displayed by Digitally
Selection of a resolution (0.01mm or 0.001mm)

*see page 149 for more detailed information

Model No.	C-500
Range of Display	At the 0.01mm Selection -9999.99~00.00~9999.99
	At the 0.001mm Selection -999.999~0.000~999.999
Resolution	0.001mm / 0.01mm Selectable
Quantized error	±1 count
Data output	RS-232C
Power supply	AC100V~AC240・less 9VA
Weight	950g

Measurement figure



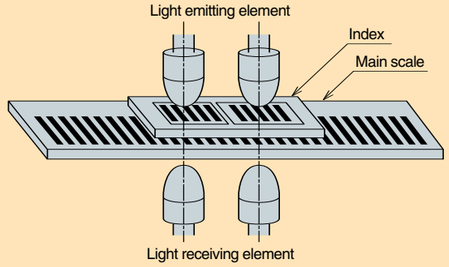
Combination example

Linear Gauge	**No. D-50S**
Digital Counter	**No. C-700**
Gauge Stand	**No. PDS-2**

※As for more detailed specifications, refer to page 123, 145 and 148.

Technical Glossary

What is a "Linear Scale"?



As illustrated on the left, a optical glass with vacuum deposition of chrome metal (opaque) at a constant pitch is called a linear scale (scale pitch of 20, 16 or 8μm is used)

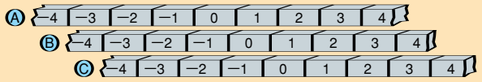
The opposite scale to this linear scale is called an Index scale. This is designed to sense two phases of signal mutually having 90° degree phase difference for the purpose of discriminating shift direction of the scale.

The light intensity of the light emitter is detected by the photo receptor located directly opposite.

When a linear scale moves, the photo receptor will receives variation of light and shade.

Linear displacement can be measured by counting these electric signals with a counter. (Counting them by 20μm pitch will give 5μm display resolution and electrically dividing the wave results in 1μm display resolution)

About "Quantizing error"

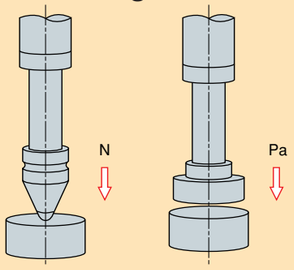


In quantization(displacement under the minimum display digit shall be defined as 0 or 1), the point "0" has a width similar to the other numeric values; including "0" closest to "1" and also "0" closest to"−1". Therefore, ±1 count error is generated in the minimum display digit.
(The value "0" is displayed after setting a linear gauge and then pressing the "Reset" switch.)

The counter "C-5" resolves the quantizing error in 1／100mm digit by setting the display value of the minimum digit to 5μm display.
(If you need to resolve the quantizing error in 1／1000mm display type, please use "C-5SS" with 0.0005mm display.)

Ⓐ's zero reference was taken at the Ⓑ's zero closer to −1.
Ⓒ's zero reference was taken at the Ⓑ's zero closer to +1

Difference between "Measuring Force" and "Measuring Pressure"



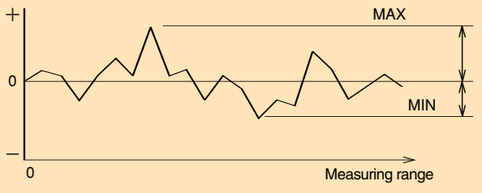
■ "Measuring Force"

Pressure of a contact point pressing a workpiece is defined as measuring force.
Generally, as the spindle back spring is integrated in a gauge, it indicate the state in which the spindle is possibly pressed into a workpiece.
(A weighted gauge can get a constant measuring force at any position)
Unit……N(newton)

■ "Measuring Pressure"

It is the value indicating the force of contact point pressing a workpiece in a unit area. (measuring force per unit layer). After specifying the area (diameter) of contact point to be in contact to a workpiece, the measuring force to be pressed in a unit area is defined as measuring force.
(When it is necessary to specify measuring pressure, a type with an attached weight is usually used since there is no change in the measuring force, even in the stroke of a spindle.)
Unit 1Pa = 0.101972 × 10^{-5}kgf／mm^2

Expression of accuracy



Accuracy is the difference between the zero reference point and the greatest deviation across the entire measurement range. +Xμm represents the combined + error Xμm and − error Xμm allowed.

Xμm represents an absolute value: if an error of Xμm occurs in +, − error is not allowed (0μm). Accordingly, if an error of Xμm occurs in −, + error is not allowed (0μm). Thus, Xμm error allowance is harder to achieve than +Xμm error allowance. (In this catalog, we use absolute value, Xμm.)

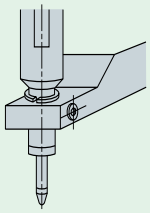
■ Accuracy of Lever-type Linear Gauges (DL-2, DL-2S)

These DL-2 and DL-2S linear gauges are used in applications very similar to lever-type dial indicators. Their accuracy is represented every 0.5mm interval, not over the entire measurement range.

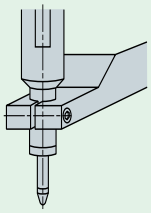
0～0.5mm	0.5mm～1.0mm
1.0～1.5mm	1.5～2.0mm

The entire measurement range is divided into 4 sections. The largest deviation among these 4 sections will determine accuracy.

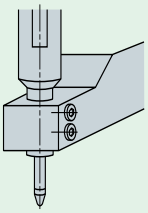
Methods of Supporting Stem



Using split collar (WB-1)



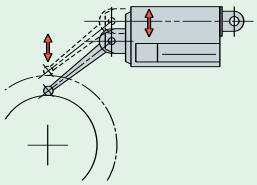
Supported by a slot

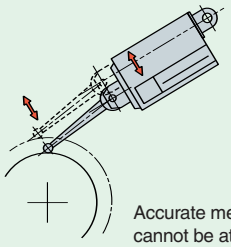


Not advisable for direct bolt fastening of stem

There are 2 methods for mounting of a linear gauge, namely by 'stem' or "lug".
As illustrated on the left, please secure a stem by a split collar or a slot. (If a stem is secured directly by a screw or screws, the spindle may not move smoothly.)
Please use split collar WB-1 designed exclusively for ϕ 8mm stem.

Positioning Lever-type Linear Gauges

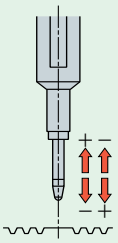


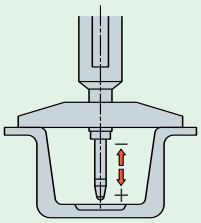


Accurate measurement cannot be attained.

As illustrated on the left for a lever type linear gauge, the lever moves linearly, different from a lever type dial indicator.
Lever type dial indicator can be freely set on a workpiece because of its arc movement.
However, lever type linear gauge should be set on a workpiece extensively at right angle. (Since no deviation from arc is generated, the measuring range is set to 2mm wide.)

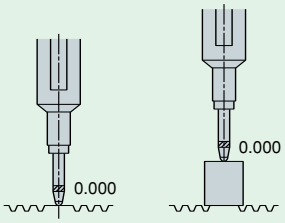
About Polarity Conversion



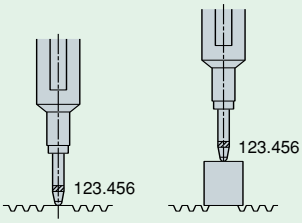


When you need the reversed value to be read, for example, in case of depth measurement, "—" count should be set in the direction of pulling up of a spindle.
In standard counters, you will find this switch on the back panel.

Reset／Preset



Reset



Preset

Linear gauges can be reset to zero at any position in the measuring range.
Counters with preset function can be set a desired value at a desired position.
Since values are displayed based on the preset value as a reference, it is suitable for managing the measured values by their absolute values.

Protection Classifications

Example of protection classes based on IEC529(DIN40050)(First=protection classes for solid 0 to 6, Second=protection classes for liquid 0 to 8)

IP-54 Protection Class

Type	Class	Specifications
Represents human body, protection and protection against foreign objects	5: Protection against dust	Provides protection against dust.
Represents protection against water	4: Splash proof type	No harmful result caused by water splashed from all directions (water splashproof).

IP-66 Protection Class

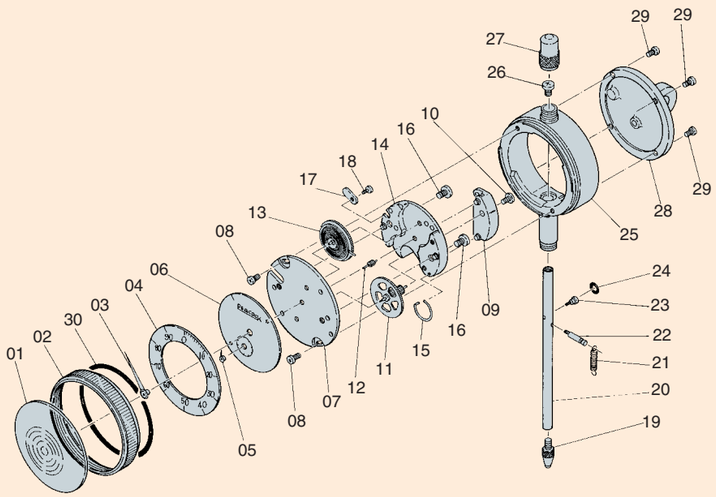
Type	Class	Specifications
Represents human body, protection and protection against foreign object	6: Anti-dust seal type	Provides complete anti-dust protection against dust invasion.
Represents protection against water	6: Full waterproof type	Protection that eliminates any water invasion including direct water jet from all directions (completely waterproof).

SECTION 12

Parts Drawings

- Dial Gauge
- New Pic Test
- Pic Test
- Dial Thickness Gauge
- Dial Lens Gauge
- Cylinder Gauge

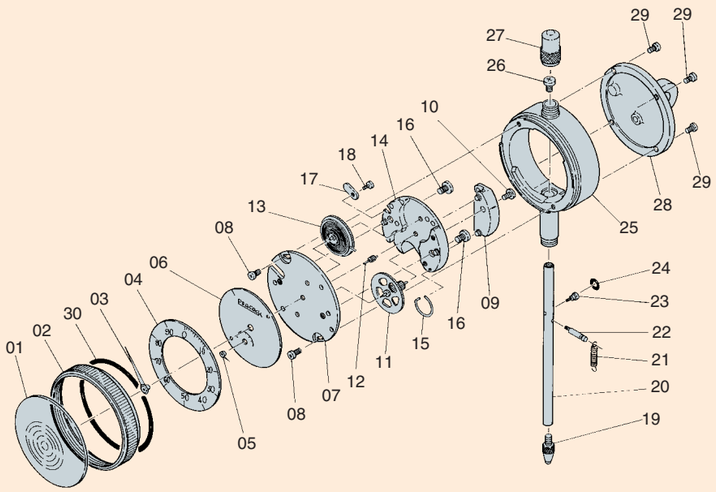
Dial Gauge
107



01 Crystal
02 Bezel
03 Pointer
04 Outer Dial
05 Hand
06 Inner Dial
07※Base Metal (with Jewel)
08※Set Screw for Base Metal (S-217)
09※Guide Metal
10※Set Screw for Guide Metal
11 120Z Main Gear (with 16Z Pinion)
12 12Z Pinion
13 120Z Idle Gear (with Hair Spring)
14※Upper Metal (with Jewel)
15 Wire Spring for Bezel
16※Set Screw for Upper Metal (S-010)
17 Claw
18 Set Screw for Claw (S-009)
19 Contact Point (X-1)
20 Spindle
21 Coil Spring
22 Guide Knock
23 Set Screw for Shock-Proof Rubber (S-219)
24 Shock-Proof Rubber
25※Inner Frame
26 Screw (S-010)
27 Cap
28 Lug Back (GB-1A)
29 Set Screw for Lug Back (S-156)
30 O-Ring

※mark are not for sell.

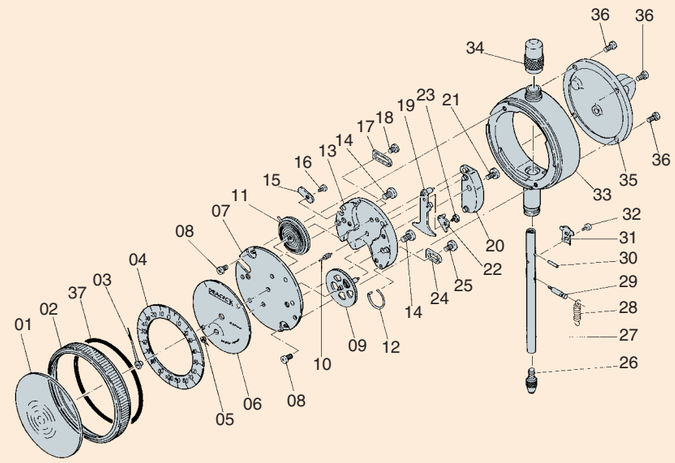
Dial Gauge
57



01 Crystal
02 Bezel
03 Pointer
04 Outer Dial
05 Hand
06 Inner Dial
07※Base Metal (with Jewel)
08※Set Screw for Base Metal (S-217)
09※Guide Metal
10※Set Screw for Guide Metal (S-012)
11 120Z Main Gear (with 16Z Pinion)
12 12Z Pinion
13 120Z Idle Gear (with Hair Spring)
14※Upper Metal (with Jewel)
15 Wire Spring for Bezel
16 Set Screw for Upper Metal (S-010)
17 Claw
18 Set Screw for Claw (S-009)
19 Contact Point (X-1)
20 Spindle
21 Coil Spring
22 Guide Knock
23 Set Screw for Shock-Proof Rubber (S-219)
24 Shock-Proof Rubber
25※Inner Frame
26 Screw (S-010)
27 Cap
28 Lug Back (GB-1A)
29 Set Screw for Lug Back (S-156)
30 O-Ring

※mark are not for sell.

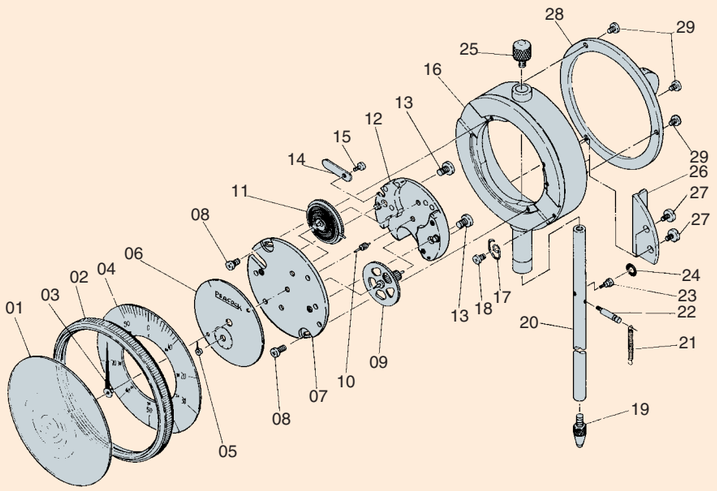
Dial Gauge
5B



01 Crystal
02 Bezel
03 Pointer
04 Outer Dial
05 Hand
06 Inner Dial
07※Base Metal (with Jewel)
08※Set Screw for Base Metal (S-217)
09 120Z Main Gear (with 16Z Pinion)
10 12Z Pinion
11 120Z Idle Gear (with Hair Spring)
12 Wire Spring for Bezel
13※Upper Metal (with Jewel)
14 Set Screw for Upper Metal (S-010)
15 Claw
16 Set Screw for Claw (S-009)
17※Adjust Stopper (B)
18※Set Screw for Adjust Stopper (B) (S-004)
19 Sector Gear (with Sector Gear Shaft, Eccentric Shaft)
20※Guide Metal
21※Set Screw for Guide Metal (S-012)
22※Bracket (with Bracket Knock A)
23※Set Screw for Bracket (S-006)
24 Adjust Stopper
25 Set Screw for Adjust Stopper (S-012)
26 Contact Point (X-1)
27 Spindle
28 Coil Spring
29 Guide Knock
30※Bracket Knock (A)
31 Spindle Stopper
32 Set Screw for Spindle Stopper (S-001)
33※Inner Frame
34 Cap
35 Lug Back (GB-1A)
36 Set Screw for Lug Back (S-156)
37 O-Ring

※mark are not for sell.

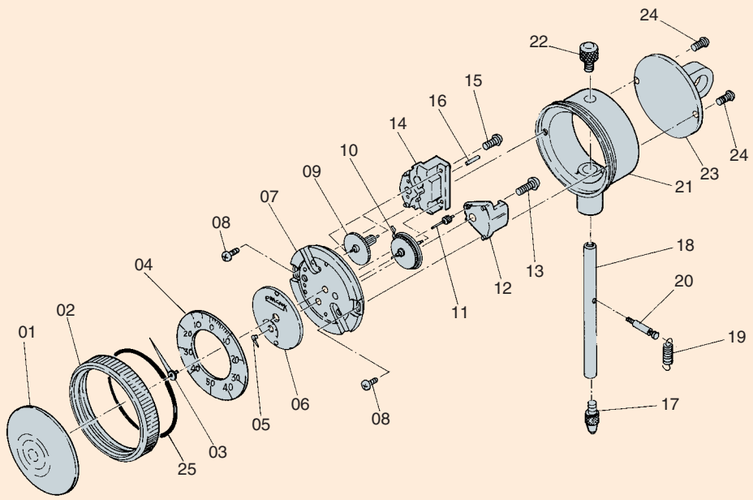
Dial Gauge
207



01 Crystal
02 Bezel
03 Pointer
04 Outer Dial
05 Hand
06 Inner Dial
07※Base Metal (with Jewel)
08※Set Screw for Base Metal (S-217)
09 120Z Main Gear (with 16Z Pinion)
10 12Z Pinion
11 120Z Idle Gear (with Hair Spring)
12※Upper Metal (with Jewel)
13※Set Screw for Upper Metal (S-010)
14 Claw
15 Set Screw for Claw (S-009)
16※Inner Frame
17 Wire Spring for Bezel
18 Set Screw for Wire Spring for Bezel (S-130)
19 Contact Point (X-1)
20 Spindle
21 Coil Spring
22 Guide Knock
23 Set Screw for Shock-Proof Rubber (S-219)
24 Shock-Proof Rubber
25 Top Screw
26※Guide Metal
27※Set Screw for Guide Metal (S-012)
28 Lug Back (GB-125)
29 Set Screw for Lug Back (S-156)

※mark are not for sell.

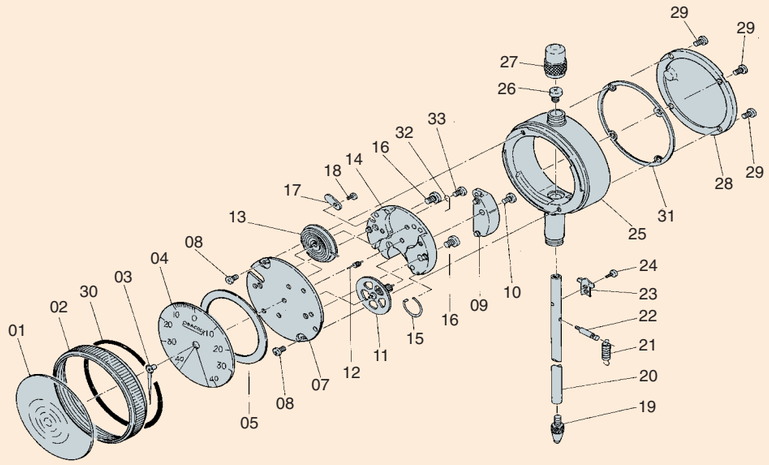
Dial Gauge
47



01 Crystal
02 Bezel
03 Pointer
04 Outer Dial
05 Hand
06 Inner Dial
07※Base Metal (with Jewel)
08※Set Screw for Base Metal (S-009)
09 70Z Main Gear (with 14Z Pinion)
10 70Z Idle Gear (70Z Gear Shaft, Hair Spring)
11 10Z Pinion
12※Center Metal (with Jewel)
13※Set Screw for Center Metal (S-165)
14※Square Metal (with Jewel)
15※Set Screw for Square Metal (S-156)
16 Knock for Hair Spring
17 Contact Point (X-107)
18 Spindle
19 Coil Spring
20 Guide Knock
21※Inner Frame
22 Top Screw
23 Lug Back (GB-147)
24 Set Screw for Lug Back (S-005)
25 O-Ring

※mark are not for sell.

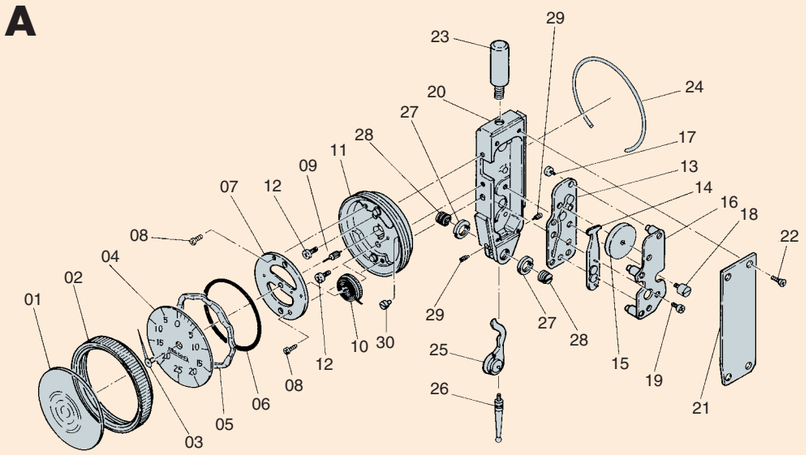
Dial Gauge
17Z



01 Crystal
02 Bezel
03 Pointer
04 Dial
05 Plate Spring
06 O-Ring
07※Base Metal (with Jewel)
08 Set Screw for Base Metal (S-217)
09※Guide Metal
10 Set Screw for Guide Metal (S-012)
11 120Z Main Gear (with 16Z Pinion)
12 12Z Pinion
13 120Z Idle Gear Assy (with Hair Spring)
14※Upper Metal (with Jewel)
15 Wire Spring for Bezel
16 Set Screw for Upper Metal (S-010)
17 Claw
18 Set Screw for Claw (S-009)
19 Contact Point (XB-1)
20 Spindle
21 Coil Spring
22 Guide Knock
23※Spindle Stopper
24 Set Screw for Stopper (S-001)
25※Inner Frame
26 Screw (S-010)
27 Cap
28 Flat Back (GB-3A)
29 Set Screw for Flat Back (S-156)
30 O-Ring
31※Packing for Flat Back
32 Stop Spring
33 Set Screw for Stop Spring (S-217)

※mark are not for sell.

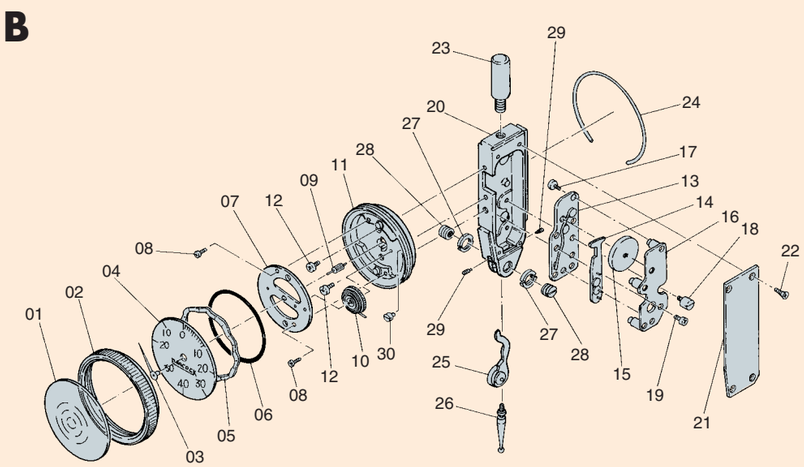
New Pic Test
PCN-1A



01 Crystal
02 Bezel
03 Pointer
04 Dial
05 Plate Spring
06 O-Ring
07 Metal (with Jewel)
08 Set Screw for Metal (S-132)
09 10Z Pinion
10 60Z Idle Gear (with Hair Spring)
11※Base Metal (with Jewel)
12※Set Screw for Base Metal (S-171)
13※Lower Plate Assy
14 Sector Gear Assy
15 Crown Gear (with 26Z Pinion)
16※Upper Plate Assy
17※Set Screw for Metal Column (S-179)
18※Stopper Screw (S-092)
19※Set Screw for Lower Plate (S-045)
20※Main Body
21※Side Cover
22 Set Scerw for Side Cover (S-185)
23 Stem
24 Wire Spring
25 Lever with Bearing
26 Contact Point (XN1A-2)
27 Nut for Pivot (2pcs./set)
28 Pivot with Miniature Bearing (2pcs./set)
29 Adjustment Screw (S-014)
30 Hair Spring Column

※mark are not for sell.

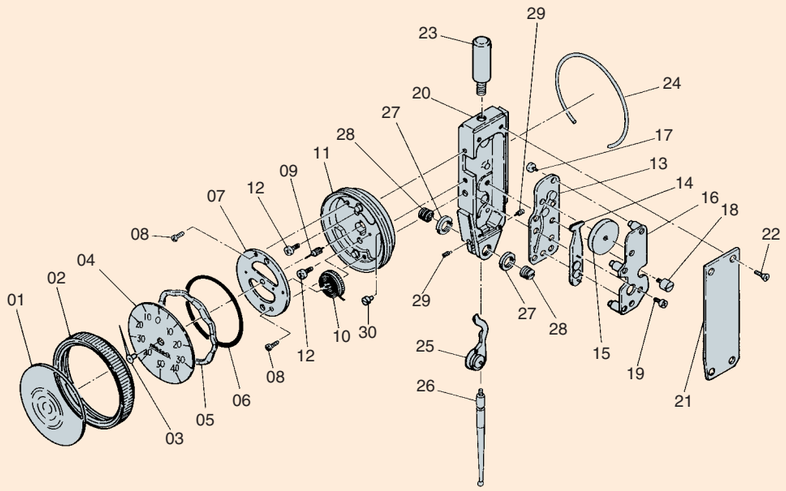
New Pic Test
PCN-1B



01 Crystal
02 Bezel
03 Pointer
04 Dial
05 Plate Spring
06 O-Ring
07 Metal (with Jewel)
08 Set Screw for Metal (S-132)
09 10Z Pinion
10 60Z Idle Gear (with Hair Spring)
11※Base Metal (with Jewel)
12※Set Screw for Base Metal (S-171)
13※Lower Plate Assy
14 Sector Gear Assy
15 Crown Gear (with 38Z Pinion)
16※Upper Plate Assy
17※Set Screw for Metal Column (S-179)
18※Stopper Screw (S-092)
19※Set Screw for Lower Plate (S-045)
20※Main Body
21※Side Cover
22 Set Scerw for Side Cover (S-185)
23 Stem
24 Wire Spring
25 Lever with Bearing
26 Contact Point (XN1B-2)
27 Nut for Pivot (2pcs./set)
28 Pivot with Miniature Bearing (2pcs./set)
29 Adjustment Screw (S-014)
30 Hair Spring Column

※mark are not for sell.

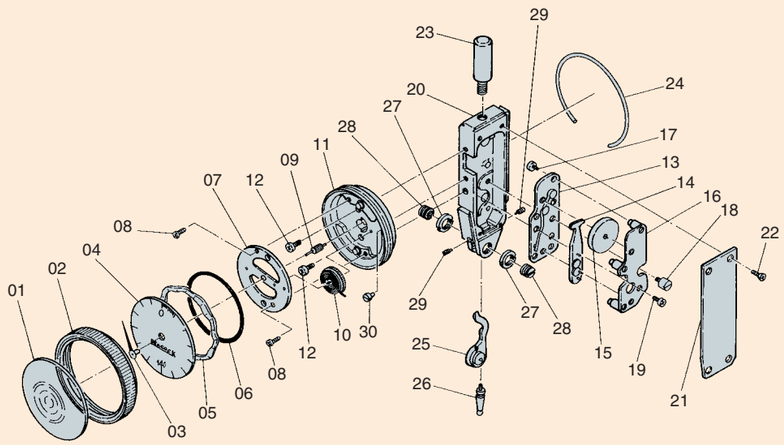
New Pic Test
PCN-1L



01	Crystal	09	10Z Pinion	17※	Set Screw for Metal Column (S-179)	24	Wire Spring
02	Bezel	10	60Z Idle Gear (with Hair Spring)	18※	Stopper Screw (S-092)	25	Lever with Bearing
03	Pointer	11※	Base Metal (with Jewel)	19※	Set Screw for Lower Plate (S-045)	26	Contact Point (XN1L-2)
04	Dial	12※	Set Screw for Base Metal (S-171)	20※	Main Body	27	Nut for Pivot (2pcs./set)
05	Plate Spring	13※	Lower Plate Assy	21※	Side Cover	28	Pivot with Miniature Bearing (2pcs./set)
06	O-Ring	14	Sector Gear Assy	22	Set Scerw for Side Cover (S-185)	29	Adjustment Screw (S-014)
07	Metal (with Jewel)	15	Crown Gear (with 26Z Pinion)	23	Stem	30	Hair Spring Column
08	Set Screw for Metal (S-132)	16※	Upper Plate Assy				

※mark are not for sell.

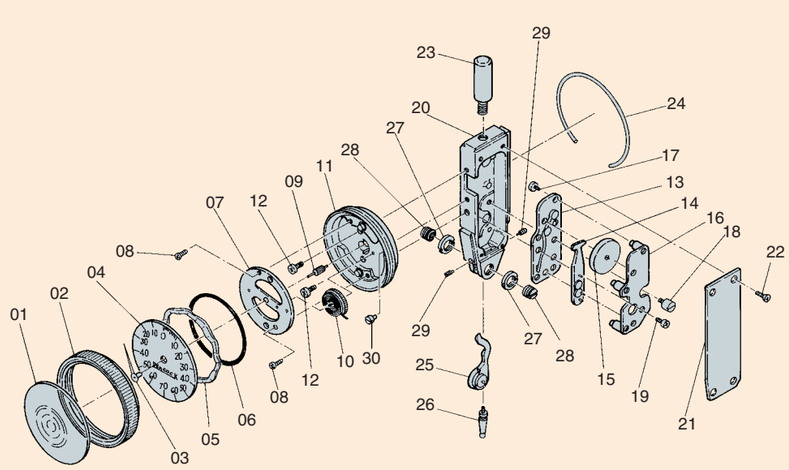
New Pic Test
PCN-2



01	Crystal	09	10Z Pinion	17※	Set Screw for Metal Column (S-179)	24	Wire Spring
02	Bezel	10	60Z Idle Gear (with Hair Spring)	18※	Stopper Screw (S-092)	25	Lever with Bearing
03	Pointer	11※	Base Metal (with Jewel)	19※	Set Screw for Lower Plate (S-045)	26	Contact Point (XN2-2)
04	Dial	12※	Set Screw for Base Metal (S-171)	20※	Main Body	27	Nut for Pivot (2pcs./set)
05	Plate Spring	13※	Lower Plate Assy	21※	Side Cover	28	Pivot with Miniature Bearing (2pcs./set)
06	O-Ring	14	Sector Gear Assy	22	Set Scerw for Side Cover (S-185)	29	Adjustment Screw (S-014)
07	Metal (with Jewel)	15	Crown Gear (with 18Z Pinion)	23	Stem	30	Hair Spring Column
08	Set Screw for Metal (S-132)	16※	Upper Plate Assy				

※mark are not for sell.

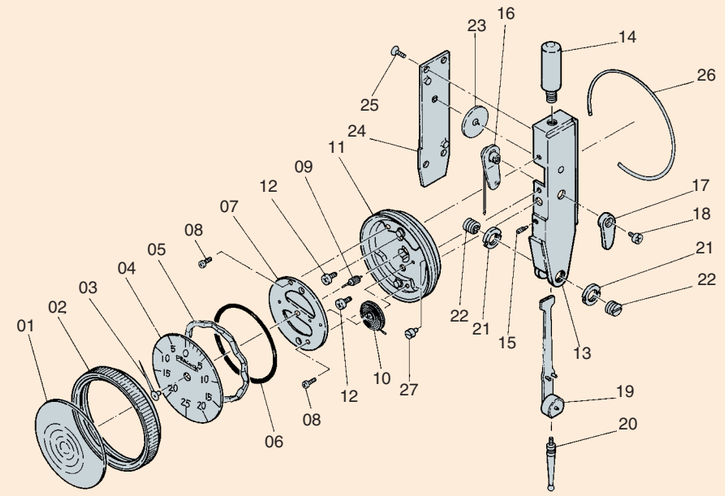
New Pic Test
PCN-S



01	Crystal	09	10Z Pinion	17※	Set Screw for Metal Column (S-179)	24	Wire Spring
02	Bezel	10	60Z Idle Gear (with Hair Spring)	18※	Stopper Screw (S-092)	25	Lever with Bearing
03	Pointer	11※	Base Metal (with Jewel)	19※	Set Screw for Lower Plate (S-045)	26	Contact Point (XNS-2)
04	Dial	12※	Set Screw for Base Metal (S-171)	20※	Main Body	27	Nut for Pivot (2pcs./set)
05	Plate Spring	13※	Lower Plate Assy	21※	Side Cover	28	Pivot with Miniature Bearing (2pcs./set)
06	O-Ring	14	Sector Gear Assy	22	Set Scerw for Side Cover (S-185)	29	Adjustment Screw (S-014)
07	Metal (with Jewel)	15	Crown Gear (with 14Z Pinion)	23	Stem	30	Hair Spring Column
08	Set Screw for Metal (S-132)	16※	Upper Plate Assy				

※mark are not for sell.

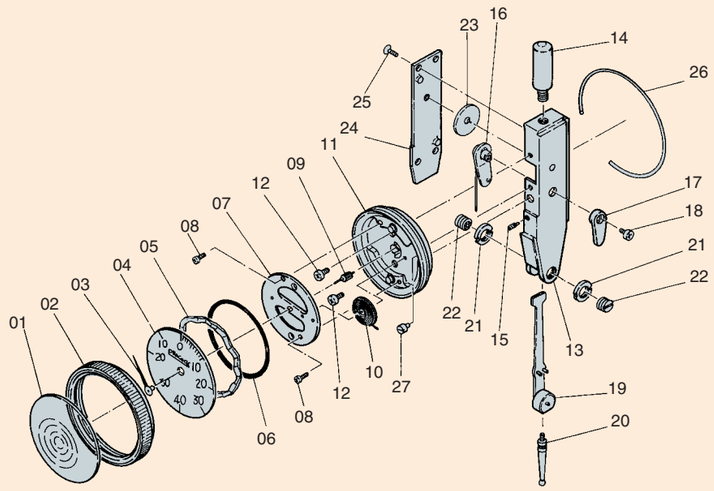
New Pic Test
PC-1A



01	Crystal	09	10Z Pinion	17	Clutch Lever	24※	Side Cover
02	Bezel	10	60Z Idle Gear (with Hair Spring)	18	Set Screw for Clutch Lever (S-179)	25	Set Screw for Side Cover (S-163)
03	Pointer	11※	Base Metal (with Jewel)	19	Sector Gear Assy	26	Wire Spring
04	Dial	12※	Set Screw for Base Metal (S-171)	20	Contact Point (XP1A-2)	27	Hair Spring Column
05	Plate Spring	13※	Main Body	21	Nut for Pivot (2pcs./set)		
06	O-Ring	14	Stem	22	Pivot with Miniature Bearing (2pcs./set)		
07	Metal (with Jewel)	15※	Stopper Screw (S-164)	23	Crown Gear (with 14Z Pinion)		
08	Set Screw for Metal (S-132)	16※	Spring for Clutch Lever Assy				

※mark are not for sell.

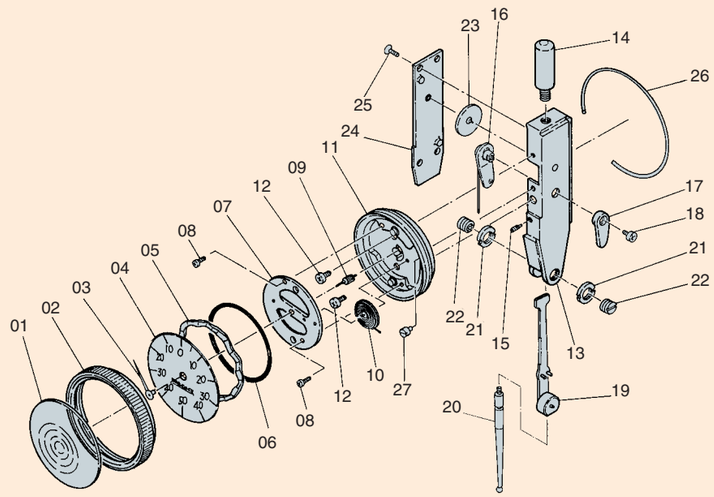
Pic Test
PC-1B



01 Crystal
02 Bezel
03 Pointer
04 Dial
05 Plate Spring
06 O-Ring
07 Metal (with Jewel)
08 Set Screw for Metal (S-132)
09 10Z Pinion
10 60Z Idle Gear (with Hair Spring)
11※Base Metal (with Jewel)
12※Set Screw for Base Metal (S-171)
13※Main Body
14 Stem
15※Stopper Screw (S-164)
16※Spring for Clutch Lever Assy
17 Clutch Lever
18 Set Screw for Clutch Lever (S-179)
19 Sector Gear Assy
20 Contact Point (XP1B-2)
21 Nut for Pivot (2pcs./set)
22 Pivot Assy with Miniature Bearing (2pcs./set)
23 Crown Gear (with 21Z Pinion)
24※Side Cover
25 Set Screw for Side Cover (S-163)
26 Wire Spring
27 Hair Spring Column

※mark are not for sell.

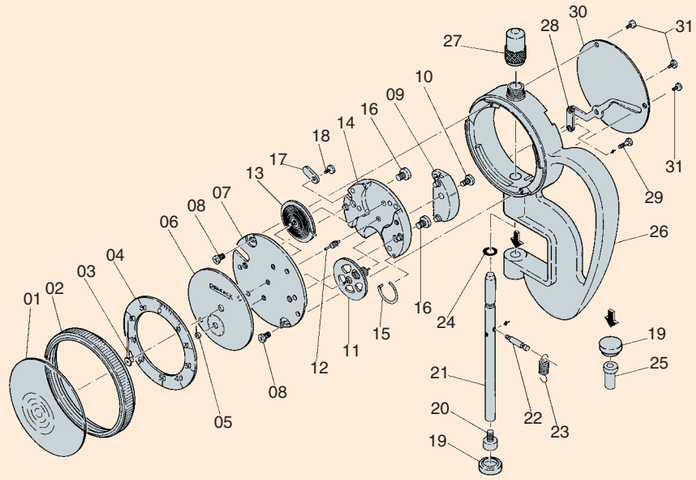
Pic Test
PC-1L



01 Crystal
02 Bezel
03 Pointer
04 Dial
05 Plate Spring
06 O-Ring
07 Metal (with Jewel)
08 Set Screw for Metal (S-132)
09 10Z Pinion
10 60Z Idle Gear (with Hair Spring)
11※Base Metal (with Jewel)
12※Set Screw for Base Metal (S-171)
13※Main Body
14 Stem
15※Stopper Screw (S-164)
16※Spring for Clutch Lever Assy
17 Clutch Lever
18 Set Screw for Clutch Lever (S-179)
19 Sector Gear Assy
20 Contact Point (XP1L-2)
21 Nut for Pivot (2pcs./set)
22 Pivot Assy with Miniature Bearing (2pcs./set)
23 Crown Gear (with 14Z Pinion)
24※Side Cover
25 Set Screw for Side Cover (S-163)
26 Wire Spring
27 Hair Spring Column

※mark are not for sell.

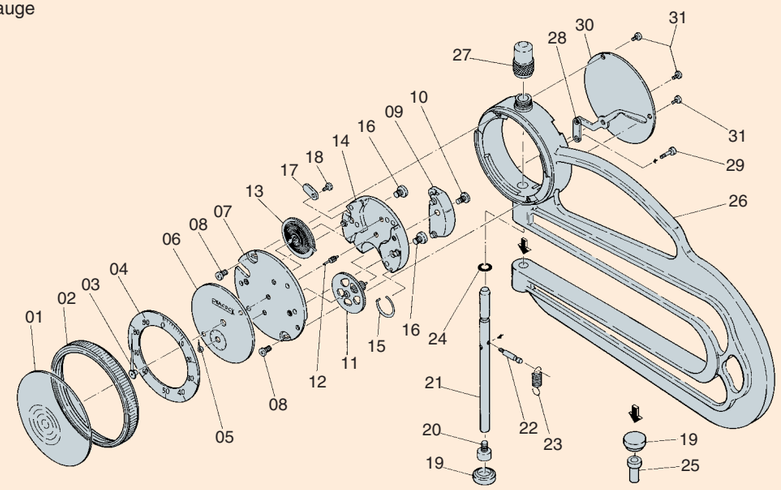
Dial Thickness Gauge
G



01 Crystal
02 Bezel
03 Pointer
04 Outer Dial
05 Hand
06 Inner Dial
07※Base Metal (with Jewel)
08※Set Screw for Base Metal (S-217)
09※Guide Metal
10※Set Screw for Guide Metal (S-012)
11※120Z Main Gear (with 16Z Pinion)
12※12Z Pinion
13※120Z Idle Gear (with Hair Spring)
14※Upper Metal (with Jewel)
15※Wire Spring for Bezel
16※Set Screw for Upper Metal (S-010)
17※Claw
18※Set Screw for Claw (S-009)
19 Anvil
20 Contact Point Base
21 Spindle
22※Guide Knock
23 Coil Spring
24※Shock-Proof Rubber
25 Anvil base
26※Frame
27※Cap
28 Lever (with Lift Knock device)
29 Set Screw for Lift (S-064)
30 Back
31 Set Screw for Back (S-128)

※mark are not for sell.

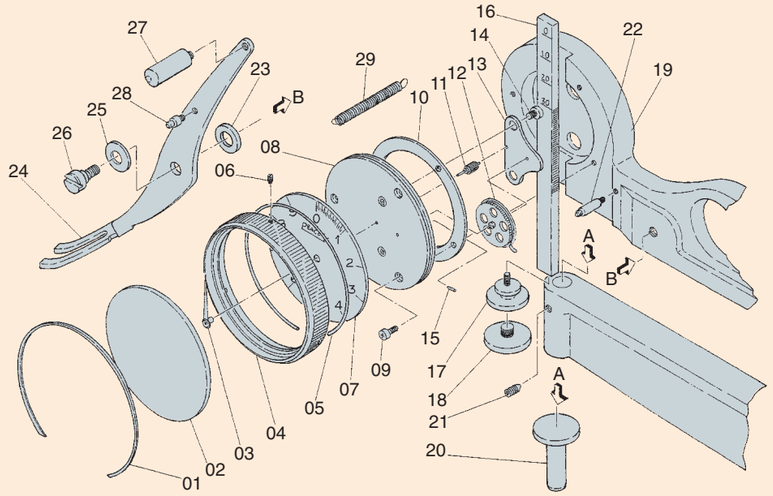
Dial Thickness Gauge
H



01 Crystal
02 Bezel
03 Pointer
04 Outer Dial
05 Hand
06 Inner Dial
07※Base Metal (with Jewel)
08※Set Screw for Metal (S-217)
09※Guide Metal
10※Set Screw for Guide Metal (S-012)
11※120Z Main Gear (with 16Z Pinion)
12※12Z Pinion
13※120Z Idle Gear (with Hair Spring)
14※Upper Metal (with Jewel)
15※Wire Spring for Bezel
16※Set Screw for Upper Metal (S-010)
17※Claw
18※Set Screw for Claw (S-009)
19 Anvil
20 Contact Point Base
21 Spindle
22※Guide Knock
23 Coil Spring
24※Shock-Proof Rubber
25 Anvil base
26※Frame
27※Cap
28 Lever (with Lift Knock device)
29 Set Screw for Lift (S-064)
30 Back
31 Set Screw for Back (S-128)

※mark are not for sell.

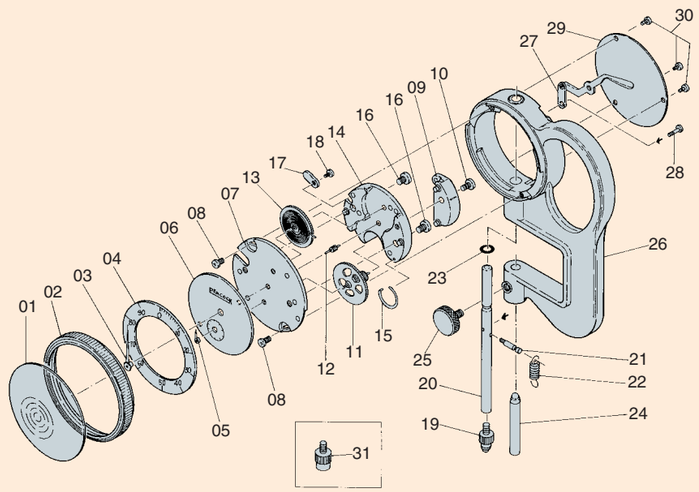
Dial Thickness Gauge
J-B



01 Spring for Crystal
02 Crystal
03 Pointer
04 Bezel
05 Teflon Ring
06 Set Screw for Bezel (S-200)
07 Dial
08※Metal Assy
09※Set Screw for Metal (S-007)
10※Ring for Metal
11※16Z Pinion
12※100Z Gear Assy
13※Upper Metal
14※Screw for Upper Metal (S-010)
15※Knock for Hair Spring
16 Spindle
17 Base for Contact Point
18 Contact Point
19※Frame
20 Anvil
21 Set Screw for Anvil
22 Spring Pillar (Longer)
23 Washer for Lever
24 Lever
25 Washer
26 Lever Axis
27 Finger Rack
28 Spring Pillar (Shorter)
29 Return Spring for Lever

※mark are not for sell.

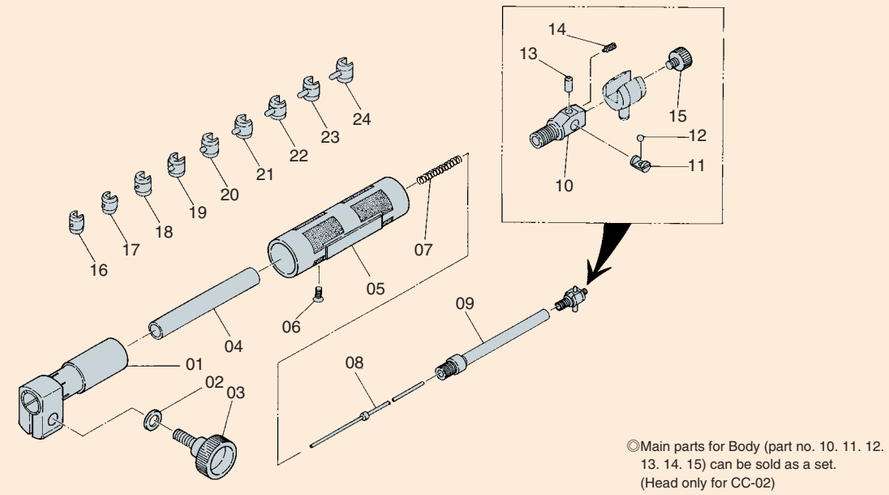
Dial Lens Gauge
GL



01 Crystal
02 Bezel
03 Pointer
04 Outer Dial
05 Hand
06 Inner Dial
07※Base Metal (with Jewel)
08※Set Screw for Base Metal (S-217)
09※Guide Metal
10※Set Screw for Guide Metal (S-012)
11※120Z Main Gear (with 16Z Pinion)
12※12Z Pinion
13※120Z Idle Gear (with Hair Spring)
14※Upper Metal (with Jewel)
15※Wire Spring for Bezel
16※Set Screw for Upper Metal (S-010)
17※Claw
18※Set Screw for Claw (S-009)
19 Contact Point (R-Type)
20 Spindle
21※Guide Knock
22 Coil Spring
23※Shock-Proof Rubber
24 Anvil
25 Knob for Anvil
26※Frame
27 Lever (with Lift Knock device)
28 Set Screw for Lift (S-064)
29 Back
30 Set Screw for Back (S-128)
31 Contact Point (Flat Type)

※mark are not for sell.

Cylinder Gauge
CC-02



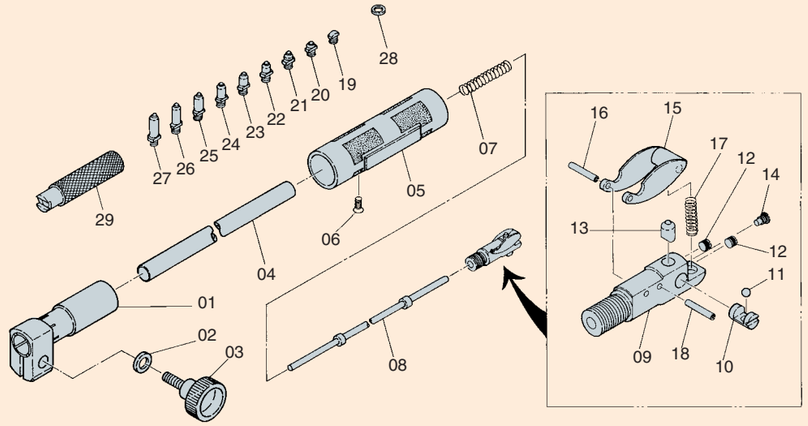
01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve B
05※Grip
06※Set Screw for Grip (S-023)
07 Coil Spring
08 Spindle (with Spindle Collar)
09※Sleeve A
10※Head
11 Race
12 Transmission Ball
13 Contact Point
14 Guide Screw
15 Lock Screw for Feeler
16 Feeler 6.0mm
17 Feeler 6.5mm
18 Feeler 7.0mm
19 Feeler 7.5mm
20 Feeler 8.0mm
21 Feeler 8.5mm
22 Feeler 9.0mm
23 Feeler 9.5mm
24 Feeler 10.0mm

◎Main parts for Body (part no. 10. 11. 12. 13. 14. 15) can be sold as a set.
(Head only for CC-02)

◎Parts no. 02 and 03 are sold as a set.

※mark are not for sell.

Cylinder Gauge
CC-01



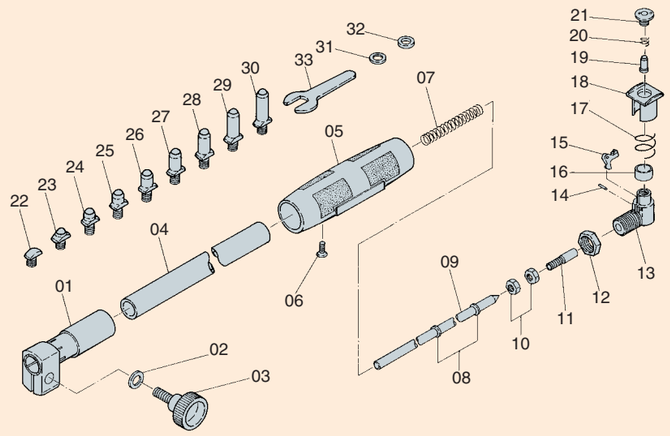
01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-023)
07 Coil Spring
08 Spindle (with Spindle Collar)
09※Head
10 Race
11 Transmission Ball
12 Set Screw for Transmission Ball (S-049)
13 Contact Point
14 Guide Screw
15 Guide
16 Rivet
17 Return Spring
18 Check Pin
19 Feeler 10mm
20 Feeler 11mm
21 Feeler 12mm
22 Feeler 13mm
23 Feeler 14mm
24 Feeler 15mm
25 Feeler 16mm
26 Feeler 17mm
27 Feeler 18mm
28 Washer 0.5mm
29 Spanner

◎Main parts for Body (part no. 09. 10. 11. 12. 13. 14. 15. 16. 17. 18) can be sold as a set.
(Head only for CC-01)

◎Parts no. 02 and 03 are sold as a set.

※mark are not for sell.

Cylinder Gauge
CC-1



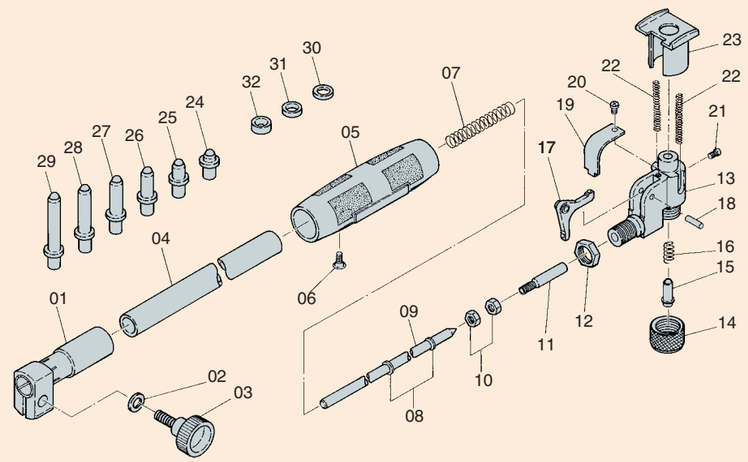
01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-021)
07 Coil Spring
08 Spindle Collar (with E type Stop Ring)
09 Spindle Rod
10 Stop Nut
11 Spindle
12 Hex Nut
13※Head
14 Transmission Pin
15 Transmission
16※Collar
17 Return Spring
18 Guide
19 Contact Point
20 Buffer Spring
21 Lock Nut
22 Feeler 18mm
23 Feeler 20mm
24 Feeler 22mm
25 Feeler 24mm
26 Feeler 26mm
27 Feeler 28mm
28 Feeler 30mm
29 Feeler 32mm
30 Feeler 34mm
31 Washer 0.5mm
32 Washer 1mm
33 Spanner

◎Main parts for Body (part no. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21) can be sold as a set.
(Head only for CC-1)

◎Parts no. 02 and 03 are sold as a set.
◎Parts no. 14 and 15 are sold as a set.

※mark are not for sell.

Cylinder Gauge
CC-2



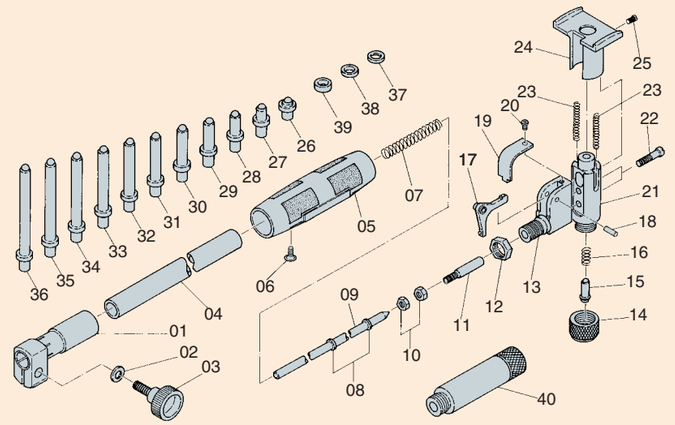
01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-021)
07 Coil Spring
08 Spindle Collar (with E type Stop Ring)
09 Spindle Rod
10 Stop Nut
11 Spindle
12 Hex Nut
13※Head
14 Feeler Lock Nut
15 Contact Point
16 Buffer Spring
17 Transmission
18 Transmission Pin
19※Head Cover
20※Set Screw for Head Cover (S-008)
21 Set Screw for Guide (S-042)
22 Return Spring
23 Guide
24 Feeler 35mm
25 Feeler 40mm
26 Feeler 45mm
27 Feeler 50mm
28 Feeler 55mm
29 Feeler 60mm
30 Washer 1mm
31 Washer 2mm
32 Washer 3mm

◎Main parts for Body (part no. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23) can be sold as a set.
(Head only for CC-2)

◎Parts no. 02 and 03 are sold as a set.
◎Parts no. 17 and 18 are sold as a set.

※mark are not for sell.

Cylinder Gauge
CC-3C



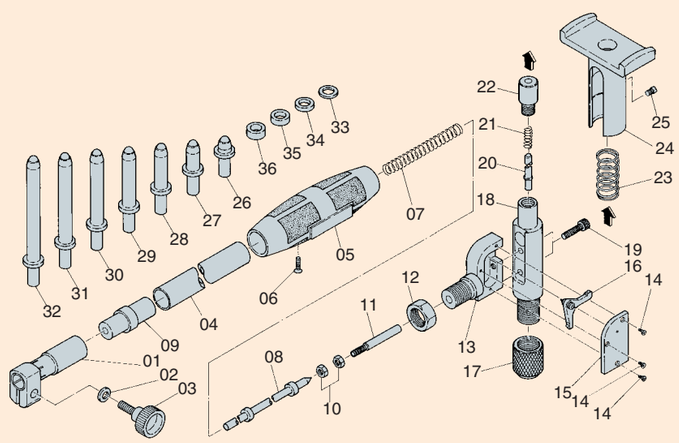
01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-021)
07 Coil Spring
08 Spindle Collar (with E type Stop Ring)
09 Spindle Rod
10 Stop Nut
11 Spindle
12 Hex Nut
13※Head A
14 Feeler Lock Nut
15 Contact Point
16 Buffer Spring
17 Transmission
18 Transmission Pin
19※Head Cover
20※Set Screw for Head Cover (S-008)
21※Head B
22※Lock Screw for Head (S-025)
23 Return Spring
24 Guide
25 Set Screw for Guide (S-042)
26 Feeler 50mm
27 Feeler 55mm
28 Feeler 60mm
29 Feeler 65mm
30 Feeler 70mm
31 Feeler 75mm
32 Feeler 80mm
33 Feeler 85mm
34 Feeler 90mm
35 Feeler 95mm
36 Feeler 100mm
37 Washer 1mm
38 Washer 2mm
39 Washer 3mm
40 Adapter 50mm

◎Main parts for Body (part no. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25) can be sold as a set.
(Head only for CC-3C)

◎Parts no. 02 and 03 are sold as a set.
◎Parts no. 17 and 18 are sold as a set.

※mark are not for sell.

Cylinder Gauge
CC-4



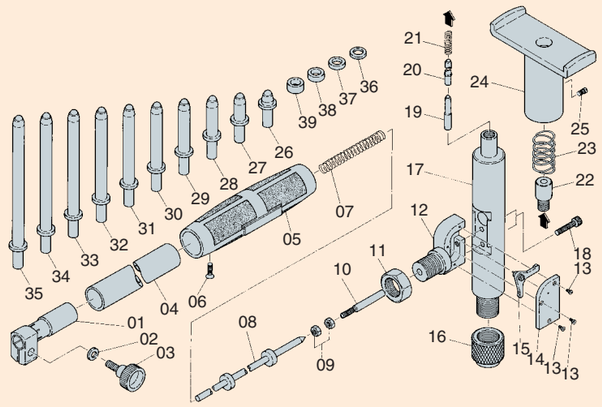
01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-028)
07 Coil Spring
08 Spindle Rod (with Spindle Collar)
09※Joint
10 Stop Nut
11 Spindle
12 Hex Nut
13※Head A
14※Set Screw for Side Cover (S-017)
15※Side Cover
16 Transmission (with Transmission Pin)
17 Feeler Lock Nut
18※Head B
19※Lock Screw for Head (S-207)
20 Contact Point
21 Buffer Spring
22※Lock Nut
23 Return Spring
24 Guide
25 Set Screw for Guide (S-043)
26 Feeler 100mm
27 Feeler 110mm
28 Feeler 120mm
29 Feeler 130mm
30 Feeler 140mm
31 Feeler 150mm
32 Feeler 160mm
33 Washer 1mm
34 Washer 2mm
35 Washer 3mm
36 Washer 4mm

◎Main parts for Body (part no. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25) can be sold as a set.
(Head only for CC-4)

◎Parts no. 02 and 03 are sold as a set.

※mark are not for sell.

Cylinder Gauge
CC-5



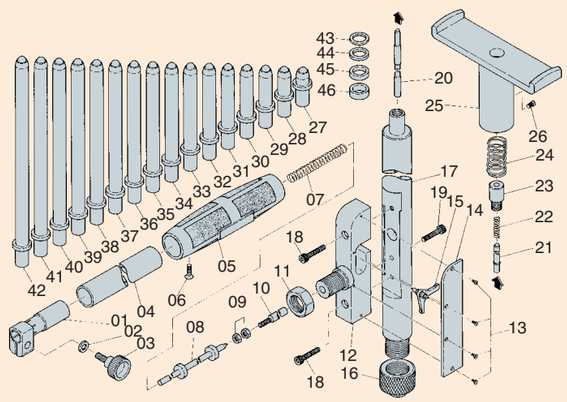
◎Main parts for Body (part no. 09. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25) can be sold as a set. (Head only for CC-5)

◎Parts no. 02 and 03 are sold as a set.

01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-031)
07 Coil Spring
08 Spindle Rod (with Spindle Collar)
09 Stop Nut
10 Spindle
11 Hex Nut
12※Head A
13※Set Screw for Side Cover (S-017)
14※Side Cover
15 Transmission (with Transmission Pin)
16 Feeler Lock Nut
17※Head B
18※Lock Screw for Head A (S-209)
19※Lock Screw for Head B (S-208)
20 Transmission Rod
21 Contact Point
22 Buffer Spring
23※Lock Nut
24 Return Spring
25 Guide
26 Set Screw for Guide (S-043)
27 Feeler 250mm
28 Feeler 260mm
29 Feeler 270mm
30 Feeler 280mm
31 Feeler 290mm
32 Feeler 300mm
33 Feeler 310mm
34 Feeler 320mm
35 Feeler 330mm
36 Feeler 340mm
37 Feeler 350mm
38 Feeler 360mm
39 Feeler 370mm
40 Feeler 380mm
41 Feeler 390mm
42 Feeler 400mm
43 Washer 1mm
44 Washer 2mm
45 Washer 3mm
46 Washer 4mm

※mark are not for sell.

Cylinder Gauge
CC-6



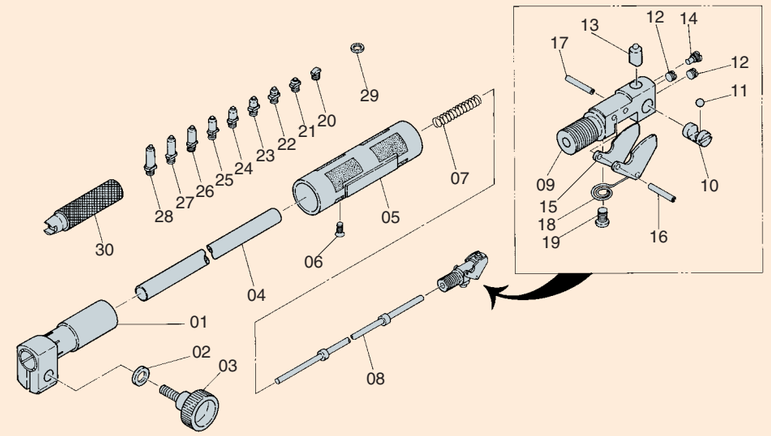
◎Main parts for Body (part no. 09. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26) can be sold as a set. (Head only for CC-6)

◎Parts no. 02 and 03 are sold as a set.

01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-031)
07 Coil Spring
08 Spindle Rod (with Spindle Collar)
09 Stop Nut
10 Spindle
11 Hex Nut
12※Head A
13※Set Screw for Side Cover (S-017)
14※Side Cover
15 Transmission (with Transmission Pin)
16 Feeler Lock Nut
17※Head B
18※Lock Screw for Head A (S-209)
19※Lock Screw for Head B (S-208)
20 Transmission Rod
21 Contact Point
22 Buffer Spring
23※Lock Nut
24 Return Spring
25 Guide
26 Set Screw for Guide (S-043)
27 Feeler 250mm
28 Feeler 260mm
29 Feeler 270mm
30 Feeler 280mm
31 Feeler 290mm
32 Feeler 300mm
33 Feeler 310mm
34 Feeler 320mm
35 Feeler 330mm
36 Feeler 340mm
37 Feeler 350mm
38 Feeler 360mm
39 Feeler 370mm
40 Feeler 380mm
41 Feeler 390mm
42 Feeler 400mm
43 Washer 1mm
44 Washer 2mm
45 Washer 3mm
46 Washer 4mm

※mark are not for sell.

Cylinder Gauge
CG-01



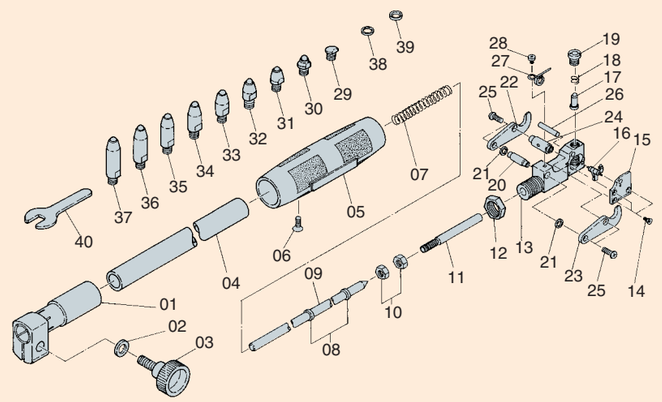
01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-023)
07 Coil Spring
08 Spindle (with Spindle Collar)
09※Head
10 Race
11 Transmission Ball
12 Set Screw for Transmission Ball
13 Contact Point
14 Guide Screw
15 Guide (with Guide Bush)
16 Rivet
17 Check Pin
18 Return Spring
19 Fixed Screw for Return Spring
20 Feeler 10mm
21 Feeler 11mm
22 Feeler 12mm
23 Feeler 13mm
24 Feeler 14mm
25 Feeler 15mm
26 Feeler 16mm
27 Feeler 17mm
28 Feeler 18mm
29 Washer 0.5mm
30 Spanner

◎Main parts for Body (part no. 09. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19) can be sold as a set. (Head only for CG-01)

◎Parts no. 02 and 03 are sold as a set.

※mark are not for sell.

Cylinder Gauge
CG-1



01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-021)
07 Coil Spring
08 Spindle Collar (with E type Stop Ring)
09 Spindle Rod
10 Stop Nut
11 Spindle
12 Hex Nut
13※Head
14※Set Screw for Side Cover (S-017)
15※Side Cover
16 Transmission Assy
17 Contact Point
18 Buffer Spring
19 Lock Nut
20※Column for Fulcrum
21※Column for Fulcrum Collar
22※Guide A
23※Guide B
24※Coupling Column
25※Set Screw for Column for Fulcrum (S-111)
26※Check Pin
27 Return Spring
28 Set Screw for Return Spring
29 Feeler 18mm
30 Feeler 20mm
31 Feeler 22mm
32 Feeler 24mm
33 Feeler 26mm
34 Feeler 28mm
35 Feeler 30mm
36 Feeler 32mm
37 Feeler 34mm
38 Washer 0.5mm
39 Washer 1mm
40 Spanner

◎Main parts for Body (part no. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28) can be sold as a set. (Head only for CG-1)

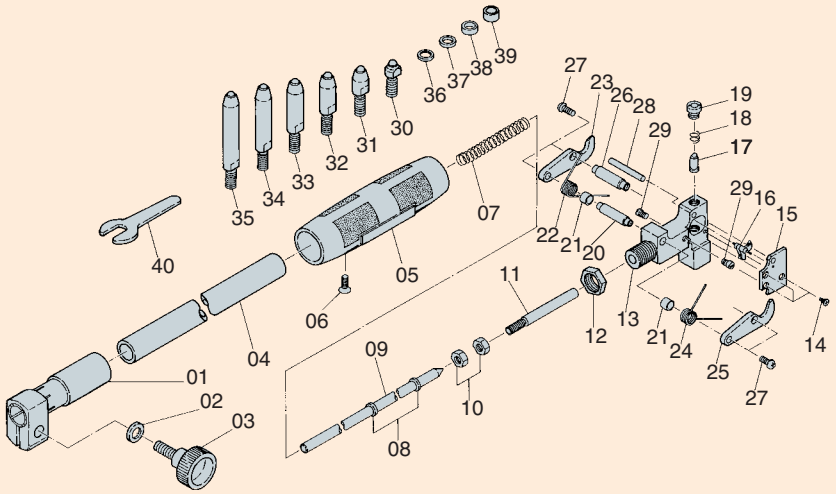
◎Parts no. 02 and 03 are sold as a set.

※mark are not for sell.

Parts Drawings

12 Cylinder Gauges

Cylinder Gauge
CG-2

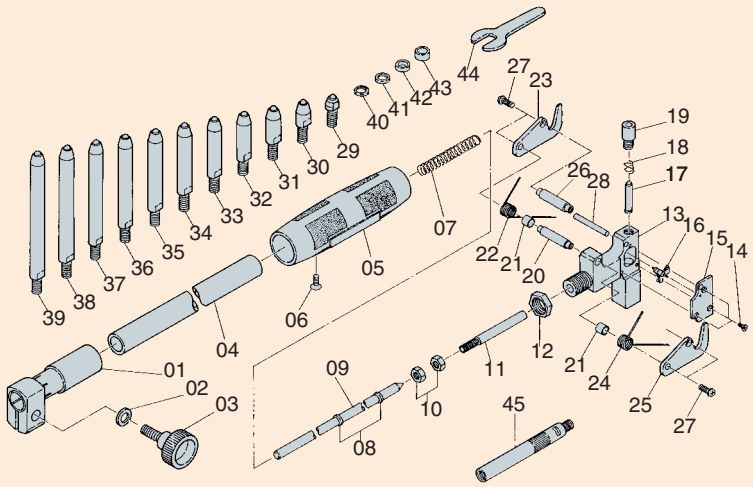


01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-021)
07 Coil Spring
08 Spindle Collar (with E type Stop Ring)
09 Spindle Rod
10 Stop Nut
11 Spindle
12 Hex Nut
13※Head
14※Set Screw for Side Cover (S-017)
15※Side Cover
16 Transmission Assy
17 Contact Point
18 Buffer Spring
19 Lock Nut
20※Column for Fulcrum
21※Column for Fulcrum Collar
22※Return Spring A
23※Guide A
24※Return Spring B
25※Guide B
26※Coupling Column
27※Set Screw for Column for Fulcrum (S-111)
28※Check Pin
29※Stop Screw for Return Spring (S-020)
30 Feeler 35mm
31 Feeler 40mm
32 Feeler 45mm
33 Feeler 50mm
34 Feeler 55mm
35 Feeler 60mm
36 Washer 0.5mm
37 Washer 1mm
38 Washer 2mm
39 Washer 3mm
40 Spanner

◎Main parts for Body (part no. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29) can be sold as a set.
(Head only for CG-2)

◎Parts no. 02 and 03 are sold as a set.

Cylinder Gauge
CG-3C



01 Indicator Holder
02 Washer
03 Knob Screw
04※Sleeve
05※Grip
06※Set Screw for Grip (S-021)
07 Coil Spring
08 Spindle Collar (with E type Stop Ring)
09 Spindle Rod
10 Stop Nut
11 Spindle
12 Hex Nut
13※Head
14※Set Screw for Side Cover (S-017)
15※Side Cover
16 Transmission Assy
17 Contact Point
18 Buffer Spring
19 Lock Nut
20※Column for Fulcrum
21※Column for Fulcrum Collar
22※Return Spring A
23※Guide A
24※Return Spring B
25※Guide B
26※Coupling Column
27※Set Screw for Column for Fulcrum (S-111)
28※Check Pin
29 Feeler 50mm
30 Feeler 55mm
31 Feeler 60mm
32 Feeler 65mm
33 Feeler 70mm
34 Feeler 75mm
35 Feeler 80mm
36 Feeler 85mm
37 Feeler 90mm
38 Feeler 95mm
39 Feeler 100mm
40 Washer 0.5mm
41 Washer 1mm
42 Washer 2mm
43 Washer 3mm
44 Spanner
45 Adapter 50mm

◎Main parts for Body (part no. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28) can be sold as a set.
(Head only for CG-3C)

◎Parts no. 02 and 03 are sold as a set.

SINCE 1916

PEACOCK

OZAKI MFG. CO., LTD.

1-63-11 TOKIWADAI, ITABASHI-KU, TOKYO 174-0071 JAPAN
TEL:81-3-3966-1109
FAX:81-3-3558-1868
BRANCHES: TOKYO, OSAKA, NAGOYA, CHIBA
FACTORIES: CHIBA, AKITA

URL:http://www.peacockozaki.jp

2019.10. 1,500U