

One Revolution Dial Gauges

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)

0.001mm Type



15Z

Graduation: 0.001mm
Range: 0.16mm

- Contact point (XB-1)
- Flat back



15Z-SWF

Graduation: 0.001mm
Range: 0.16mm

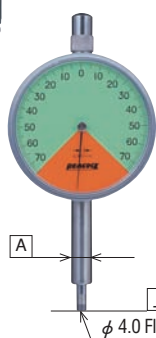
- Contact point (XB-2A)
- Oil-proof type
- Flat back



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



15DZ

Graduation: 0.001mm
Range: 0.16mm

- Large dial face ($\phi 66.5$)
- Contact point (XB-1)
- Flat back

New

0.01mm Type



17Z

Graduation: 0.01mm
Range: 0.8mm

- Contact point (XB-1)
- Flat back



17Z-SWA

Graduation: 0.01mm
Range: 0.8mm

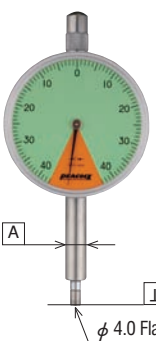
- Oil-proof type
- Contact point (XB-2)
- Flat back



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



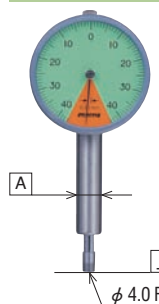
117Z

Graduation: 0.01mm
Range: 1.0mm

- Contact point (XB-1)
- Flat back

New

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

- Contact point (X-112)
- Back plunger type

Specifications

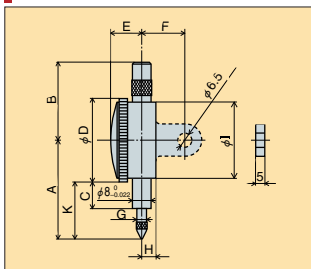
(unit: μm)

Model	Graduation (mm)	Range (mm) (Free stroke)	Reading	Indication error					Retrace error	Repeatability	Measuring force less than (N)
				1/10 revolution	1/2 revolution	One revolution	Two revolutions	Whole measuring range			
15Z	0.001	0.16 (3.0)	80 - 0 - 80	2.5	±3	±4	—	—	3	0.5	1.5
15Z-SWF	0.001	0.16 (3.0)	80 - 0 - 80	2.5	±3	±4	—	—	3	0.5	1.5
5Z-XB	0.001	0.14 (3.0)	70 - 0 - 70	2.5	±3	±4	—	—	3	0.5	1.5
5Z	0.001	0.14 (3.0)	70 - 0 - 70	2.5	±3	±4	—	—	3	0.5	1.5
18	0.001	0.16 (3.0)	80 - 0 - 80	2.5	±3	±4	—	—	3	0.5	1.5
17Z	0.01	0.8 (7.0)	40 - 0 - 40	8	±9	±10	—	—	5	5	1.4
17Z-SWA	0.01	0.8 (7.0)	40 - 0 - 40	8	±9	±10	—	—	5	5	1.4
107Z-XB	0.01	0.8 (7.0)	40 - 0 - 40	8	±9	±10	—	—	5	5	1.4
107Z	0.01	0.8 (7.0)	40 - 0 - 40	8	±9	±10	—	—	5	5	1.4
17B	0.01	0.8 (10.0)	40 - 0 - 40	8	±9	±10	—	—	5	5	1.4
New 15DZ	0.001	0.16 (3.0)	80 - 0 - 80	2.5	±3	±4	—	—	3	0.7	1.5
New 117Z	0.01	1.0 (7.0)	50 - 0 - 50	8	±9	±10	—	—	5	5	1.4
47Z	0.01	0.8 (4.0)	40 - 0 - 40	9	—	±13	—	—	6	5	1.4
47Z-XB	0.01	0.8 (4.0)	40 - 0 - 40	9	—	±13	—	—	6	5	1.4
47SZ	0.01	0.8 (4.0)	40 - 0 - 40	9	—	±13	—	—	6	5	1.4
196Z	0.01	0.8 (4.0)	40 - 0 - 40	10	±12	±15	—	—	6	5	1.4
New 147Z	0.01	1.0 (4.0)	50 - 0 - 50	9	—	±13	—	—	6	5	1.4
New 36Z	0.005	0.4 (3.0)	20 - 0 - 20	—	—	±10	—	—	5	5	1.4

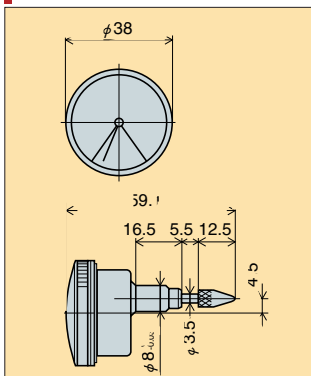
Note- All Dial Indicators (except for 196Z) listed above have flat back as standard.

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		29	55	16.8					39.9
18	18L	69.4		18.5	38.5						
17Z	17ZL	65		30	38.5						
17Z-SWA	17Z-SWAL	65		53	14.5	42.9					
107Z-XB	107Z-XBL	69.4		30	39.9						
107Z	107ZL	66.4		20(-)	38.5						
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	(20)	7.6	36		
47Z	47ZL	58.9	20	30	36	13	(15)	3.5	6.5	32	40.9
47Z-XB	47Z-XBL	61.9		9.7							43.9
47SZ	47SZL	41.1		23.1							
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.