

Dial Indicators

Comparison measuring instruments which ensure high quality, high accuracy and reliability.

Optional Accessories

- Limit hand (2 pcs.): **21AZB195**
- Bezel clamp: **21AZB148**

FEATURES

Metric									
Order No.									
w/lug	Flat-back	1/10 Rev	1/2 Rev	1 Rev	Measuring range	Hysteresis	Repeat-ability	Dial reading	Measuring force (N)
2050A	2050AB	✓						±0-100	2.0 or less
2050A-60	2050AB-60	✓						±0-100	2.5 or less
2050A-19	2050AB-19	✓						±0-100	2.0 or less
2320A-10	2320AB-10	✓						±0-100	2.0 or less
2052A	2052AB	✓						±0-100	2.5 or less
2052A-19	2052AB-19	✓						±0-100	2.5 or less
2330A-10	2330AB-10	✓						±0-100	2.5 or less
2952A	2952AB	✓						100-0	2.5 or less

SPECIFICATIONS

Metric										ISO/JIS type	
Order No.		Graduation (mm)	Range (range/rev) (mm)	Maximum permissible error (MPE) (μm)					Dial reading	Measuring force (N)	
w/lug	Flat-back			Indication error				Hysteresis			Repeat- ability
				1/10 Rev	1/2 Rev	1 Rev	Measuring range				
2050A	2050AB	0.01	20 (1)	8	10	15	20	5	4	±0-100	2.0 or less
2050A-60*	2050AB-60*	0.01	20 (1)	8	10	15	20	5	4	±0-100	2.5 or less
2050A-19	2050AB-19	0.01	20 (1)	8	10	15	20	5	4	±0-100	2.0 or less
2320A-10	2320AB-10	0.01	20 (1)	8	10	15	20	5	4	±0-100	2.0 or less
2052A	2052AB	0.01	30 (1)	10	12	15	25	7	5	±0-100	2.5 or less
2052A-19	2052AB-19	0.01	30 (1)	10	12	15	25	7	5	±0-100	2.5 or less
2330A-10	2330AB-10	0.01	30 (1)	10	12	15	25	7	5	±0-100	2.5 or less
2952A	2952AB	0.01	30 (1)	10	12	15	25	7	5	100-0	2.5 or less

* 2050A-60 and 2050AB-60 are water-proof types that use a rubber bellows to cover the spindle.

Note that the outer diameter of the bellows (ø9.5) is larger than that of the stem (ø8).

Note: Completed products inspection is performed in the vertical orientation (contact point downward) and the stated accuracy is guaranteed.

Inch									
Order No.									
w/lug	Flat-back	1/10 Rev	1/2 Rev	1 Rev	Measuring range	Hysteresis	Repeat-ability	Dial reading	Measuring force (N)
2416A	2416AB	✓						±0-100	1.8 or less
2416A-06	2416AB-06	✓						±0-100	1.8 or less
2416A-10	2416AB-10	✓						±0-100	1.8 or less
2417A	2417AB	✓						0-50-0	1.8 or less
2424A-19	2424AB-19	✓						±0-100	2.5 or less
2776A	2776AB	✓						±0-50	2.5 or less
2904A	2904AB	✓						100-0	1.8 or less

Inch		Graduation (in)	Range (range/rev) (in)	Accuracy (in)		Repeat-ability (in)	Dial reading	Measuring force (N)
w/lug	Flat-back			First 1 Rev/2.5 Rev/10 Rev	Retrace			
2416A	2416AB	0.001	1 (0.1)	±0.001/±0.001/±0.002	0.0002	±0.0002	±0-100	1.8 or less
2416A-06	2416AB-06	0.001	1 (0.1)	±0.001/±0.001/±0.002	0.0002	±0.0002	±0-100	1.8 or less
2416A-10	2416AB-10	0.001	1 (0.1)	±0.001/±0.001/±0.002	0.0002	±0.0002	±0-100	1.8 or less
2417A	2417AB	0.001	1 (0.1)	±0.001/±0.001/±0.002	0.0002	±0.0002	0-50-0	1.8 or less
2424A-19	2424AB-19	0.001	2 (0.1)	±0.001/±0.001/±0.002/±0.003 (First 20 Rev)	0.00033	±0.0002	±0-100	2.5 or less
2776A	2776AB	0.0005	1 (0.05)	±0.0005/±0.0005/±0.0015/±0.002 (First 20 Rev)	0.0002	±0.0001	±0-50	2.5 or less
2904A	2904AB	0.001	1 (0.1)	±0.001/±0.001/±0.002	0.0002	±0.0002	100-0	1.8 or less

Note: Completed products inspection is performed in the vertical orientation (contact point downward) and the stated accuracy is guaranteed.

DIMENSIONS

ISO/JIS Type

Order No.	A	B	C	D	E	F	G	H	I	Mass (g)
										w/lug Flat-back
2050A	38.8	75.2	57	17.7	20	16.9	29.8	52	7.6	149 140
2050A-60	59.8	87.2	57	17.7	20	12.3	46.4	52	7.6	155 145
2050A-19	38.8	75.2	57	17.7	20	16.9	29.8	52	7.6	149 140
2320A-10	38.8	75.2	57	17.7	20	16.9	29.8	52	7.6	150 141
2052A	38.8	88.7	57	17.7	20	16.9	43.3	52	7.6	152 143
2052A-19	38.8	88.7	57	17.7	20	16.9	43.3	52	7.6	152 143
2330A-10	38.8	88.7	57	17.7	20	16.9	43.3	52	7.6	153 144
2952A	38.8	88.7	57	17.7	20	16.9	43.3	52	7.6	152 143

ANSI/AGD Type

Order No.	A	B	C	D	E	F	G	H	I	Mass (g)
										w/lug Flat-back
2416A	1.53	3.02	2.24	0.70	3/4	0.54	1.37	2.05	0.30	164 139
2416A-06	1.53	3.02	2.24	0.70	3/4	0.54	1.37	2.05	0.30	164 139
2416A-10	1.53	3.02	2.24	0.70	3/4	0.54	1.37	2.05	0.30	164 139
2417A	1.53	3.02	2.24	0.70	3/4	0.54	1.37	2.05	0.30	164 139
2424A-19	4.65	5.61	2.24	0.70	5/6	2.14	2.35	2.05	0.37	248 239
2776A	1.53	3.02	2.24	0.70	3/4	0.54	1.37	2.05	0.30	164 139
2904A	1.53	3.02	2.24	0.70	3/4	0.54	1.37	2.05	0.30	164 139

Note: Refer to pages F-57 to F-60 for details of contact points.