

FEATURES

Metric

Order No.									
w/ lug	Flat-back								
2050S	2050SB	✓	—	—	—	—	—	—	—
2050S-60	2050SB-60	✓	—	—	—	—	—	—	—
2050S-19	2050SB-19	✓	—	—	—	—	—	—	—
2320S-10	2320SB-10	✓	—	—	—	—	—	—	—
2052S	2052SB	✓	—	—	—	—	—	—	—
2052S-19	2052SB-19	✓	—	—	—	—	—	—	—
2330S-10	2330SB-10	✓	—	—	—	—	—	—	—
2952S	2952SB	—	—	—	—	—	—	—	—

SPECIFICATIONS

Metric

ISO/JIS type

Order No.		Graduation	Range (range/rev)	Accuracy*				Repeatability	Dial reading	Measuring force
w/ lug	Flat-back			Overall	Retrace	1/10 Rev	1 Rev			
2050S	2050SB	0.01 mm	20 mm (1 mm)	20 μm	5 μm	8 μm	15 μm	4 μm	±0-100	2.0 N or less
2050S-60	2050SB-60	0.01 mm	20 mm (1 mm)	20 μm	5 μm	8 μm	15 μm	4 μm	±0-100	2.5 N or less
2050S-19	2050SB-19	0.01 mm	20 mm (1 mm)	20 μm	5 μm	8 μm	15 μm	4 μm	±0-100	2.0 N or less
2320S-10	2320SB-10	0.01 mm	20 mm (1 mm)	20 μm	5 μm	8 μm	15 μm	4 μm	±0-100	2.0 N or less
2052S	2052SB	0.01 mm	30 mm (1 mm)	25 μm	7 μm	10 μm	15 μm	5 μm	±0-100	2.5 N or less
2052S-19	2052SB-19	0.01 mm	30 mm (1 mm)	25 μm	7 μm	10 μm	15 μm	5 μm	±0-100	2.5 N or less
2330S-10	2330SB-10	0.01 mm	30 mm (1 mm)	25 μm	7 μm	10 μm	15 μm	5 μm	±0-100	2.5 N or less
2952S	2952SB	0.01 mm	30 mm (1 mm)	25 μm	7 μm	10 μm	15 μm	5 μm	100-0	2.5 N or less

*1 2050S-60 and 2050SB-60 are waterproof 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).

*2 Completed products inspection is performed in the vertical position (contact point downward) and the stated accuracy is guaranteed.

Inch

Order No.									
w/ lug	Flat-back								
2416S	2416SB	✓	—	—	—	—	—	—	—
2416S-06	2416SB-06	✓	—	—	—	—	—	—	—
2416S-10	2416SB-10	✓	—	—	—	—	—	—	—
2417S	2417SB	—	—	—	—	—	—	—	—
2424S-19	2424SB-19	✓	—	—	—	—	—	—	—
2776S	2776SB	✓	—	—	—	—	—	—	—
2904S	2904SB	—	—	—	—	—	—	—	—

Inch

ANSI/AGD type

Order No.		Graduation	Range (range/rev)	Accuracy*		Repeatability	Dial reading	Measuring force
w/ lug	Flat-back			First 1 Rev / 2.5 Rev / 10 Rev	Retrace			
2416S	2416SB	0.001 in	1 in (0.1 in)	±0.001 in / ±0.001 in / ±0.002 in	0.0002 in	±0.0002 in	±0-100	1.8 N or less
2416S-06	2416SB-06	0.001 in	1 in (0.1 in)	±0.001 in / ±0.001 in / ±0.002 in	0.0002 in	±0.0002 in	±0-100	1.8 N or less
2416S-10	2416SB-10	0.001 in	1 in (0.1 in)	±0.001 in / ±0.001 in / ±0.002 in	0.0002 in	±0.0002 in	±0-100	1.8 N or less
2417S	2417SB	0.001 in	1 in (0.1 in)	±0.001 in / ±0.001 in / ±0.002 in	0.0002 in	±0.0002 in	0-50-0	1.8 N or less
2424S-19	2424SB-19	0.001 in	2 in (0.1 in)	±0.001 in / ±0.001 in / ±0.002 in / ±0.003 in (First 20Rev)	0.00033 in	±0.0002 in	±0-100	2.5 N or less
2776S	2776SB	0.0005 in	1 in (0.05 in)	±0.0005 in / ±0.0005 in / ±0.0015 in / ±0.002 in (First 20Rev)	0.0002 in	±0.0001 in	±0-50	2.5 N or less
2904S	2904SB	0.001 in	1 in (0.1 in)	±0.001 in / ±0.001 in / ±0.002 in	0.0002 in	±0.0002 in	100-0	1.8 N or less

* Completed products inspection is performed in the vertical position (contact point downward) and the stated accuracy is guaranteed.

DIMENSIONS

ISO/JIS Type

2050S-60

ANSI/AGD Type

Unit: mm

Order No.	A	B	C	D	E	F	G	H	I
2050S	38.8	75.2	57	17.7	20	16.9	29.8	52	7.6
2050S-60	59.8	87.2	57	17.7	20	12.3	46.4	52	7.6
2050S-19	38.8	75.2	57	17.7	20	16.9	29.8	52	7.6
2320S-10	38.8	75.2	57	17.7	20	16.9	29.8	52	7.6
2052S	38.8	88.7	57	17.7	20	16.9	43.3	52	7.6
2052S-19	38.8	88.7	57	17.7	20	16.9	43.3	52	7.6
2330S-10	38.8	88.7	57	17.7	20	16.9	43.3	52	7.6
2952S	38.8	88.7	57	17.7	20	16.9	43.3	52	7.6

Order No.	A	B	C	D	E	F	G	H	I
2416S	38.9	76.8	57	17.7	19	13.6	34.7	52	7.6
2416S-06	38.9	76.8	57	17.7	19	13.6	34.7	52	7.6
2416S-10	38.9	76.8	57	17.7	19	13.6	34.7	52	7.6
2417S	38.9	76.8	57	17.7	19	13.6	34.7	52	7.6
2424S-19	118	142.5	57	17.7	20.9	54.3	59.7	52	9.5
2776S	38.9	76.8	57	17.7	19	13.6	34.7	52	7.6
2904S	38.9	76.8	57	17.7	19	13.6	34.7	52	7.6