Precision Flat Level

To measure…			
Flatness	Straightness	Squareness	Parallelism
◎	○	×	○

Stock No.542AA
Grade AA (JIS) Traceability

Stock No.542A
Grade A (JIS) Traceability

Stock No.542 B
Grade B (JIS) Traceability

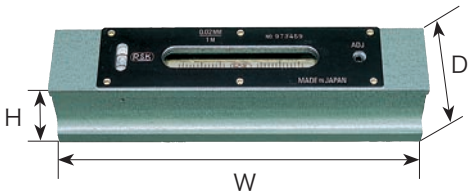
■ Work Measurement: Grade AA and Grade A

SIZE	W × H × D (mm)	Sensitivity (mm/m)	Net Weight (kg)
150	150 × 45 × 49	0.02 (4″)	1.3
200	200 × 48 × 49	0.05 (10″)	1.7
250	250 × 48 × 49	0.1 (20″)	2.3
300	300 × 48 × 49		2.8

■ Work Measurement: Grade B

SIZE	W × H × D (mm)	Sensitivity (mm/m)	Net Weight (kg)
150	150 × 48 × 47	0.02 (4″)	1.3
200	200 × 48 × 47	0.05 (10″)	1.7
250	250 × 48 × 47	0.1 (20″)	2.3
300	300 × 48 × 47		2.8

Stock No.542
Standard Type (NOT JIS standard) Traceability



■ Work Measurement: Standard type

SIZE	W × H × D (mm)	Sensitivity (mm/m)	Net Weight (kg)
100	100 × 48 × 47	0.02 (4″)	0.8
150	150 × 48 × 47	0.05 (10″)	1.3
200	200 × 48 × 47	0.1 (20″)	1.7
250	250 × 48 × 47		2.3
300	300 × 48 × 47		2.8
450	450 × 52 × 50		4.5
600	600 × 52 × 50		6.0

- Grade AA, A and B are manufactured and inspected under the JIS B 7510 standard.
  (See P5. for further information on each grade.)
- Grade AA has ±0.2 scale all range accuracy in the main bubble
- Grade AA and Grade A have an insulating material which prevents heat transfering.
- Grade AA and Grade A have a bubble chamber in which the length of the bubble is manually adjustable.

	Code Number	Size	Sensitivity	Net Weight (kg)
Grade AA	542-1502AA	150	0.02	1.3
	542-2002AA	200		1.7
	542-2502AA	250		2.3
	542-3002AA	300		2.8
	542-1505AA	150	0.05	1.3
	542-2005AA	200		1.7
	542-2505AA	250		2.3
	542-3005AA	300		2.8
	542-1501AA	150	0.1	1.3
	542-2001AA	200		1.7
	542-2501AA	250		2.3
	542-3001AA	300		2.8
Grade B	542-1502A	150	0.02	1.3
	542-2002A	200		1.7
	542-2502A	250		2.3
	542-3002A	300		2.8
	542-1505A	150	0.05	1.3
	542-2005A	200		1.7
	542-2505A	250		2.3
	542-3005A	300		2.8
	542-1501A	150	0.1	1.3
	542-2001A	200		1.7
	542-2501A	250		2.3
	542-3001A	300		2.8
Gade A	542-1502B	150	0.02	1.3
	542-2002B	200		1.7
	542-2502B	250		2.3
	542-3002B	300		2.8
	542-1505B	150	0.05	1.3
	542-2005B	200		1.7
	542-2505B	250		2.3
	542-3005B	300		2.8
	542-1501B	150	0.1	1.3
	542-2001B	200		1.7
	542-2501B	250		2.3
	542-3001B	300		2.8
Standard Type	542-1002	100	0.02	0.8
	542-1502	150		1.3
	542-2002	200		1.7
	542-2502	250		2.3
	542-3002	300		2.8
	542-4502	450		4.5
	542-6002	600		6.0
	542-1005	100	0.05	0.8
	542-1505	150		1.3
	542-2005	200		1.7
	542-2505	250		2.3
	542-3005	300		2.8
	542-4505	450		4.5
	542-6005	600		6.0
	542-1001	100	0.1	0.8
	542-1501	150		1.3
	542-2001	200		1.7
	542-2501	250		2.3
	542-3001	300		2.8
	542-4501	450		4.5
	542-6001	600		6.0

PRECISION LEVEL

■ Code Number of Precision Square Level

■ About Grade Under the JIS standard, guarantee level is different from each grades.

※ Grade AA is our original standard. It adopts more strict inspections than JIS standard.

Precision Square Level

Item		Grade AA			Grade A (JIS B 7510)			Grade B (JIS B 7510)		
		Class 1	Class 2	Class 3	Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
Allowable error of main bubble	All Range	±0.2 Scale or less			±0.5 Scale or less	±0.3 Scale or less		±0.7 Scale or less	±0.5 Scale or less	
	Adjacent Scale	0.2 Scale or less			0.2 Scale or less			0.5 Scale or less		
Squareness bottom to side surface		0.015mm/m or less	0.025mm/m or less		0.015mm/m or less	0.025mm/m or less		0.02mm/m or less	0.035mm/m or less	
Parallelism v groove to surface with v groove		0.5 Scale or less			0.5 Scale or less			0.5 Scale or less		
Parallelism bottom to top side		0.5 Scale or less			0.5 Scale or less			0.5 Scale or less		
Flattness bottom to side surface		0.003mm or less	0.005mm or less		0.003mm or less	0.005mm or less		0.003mm or less	0.005mm or less	

Precision Flat Level

Item		Grade AA			Grade A (JIS B 7510)			Grade B (JIS B 7510)		
		Class 1	Class 2	Class 3	Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
Allowable error of main bubble	All Range	±0.2 Scale or less			±0.5 Scale or less	±0.3 Scale or less		±0.7 Scale or less	±0.5 Scale or less	
	Adjacent Scale	0.2 Scale or less			0.2 Scale or less			0.5 Scale or less		
Parallelism v groove to surface with v groove		0.5 Scale or less			0.5 Scale or less			0.5 Scale or less		
Flattness bottom surface		0.003mm or less	0.005mm or less		0.003mm or less	0.005mm or less		0.003mm or less	0.005mm or less	