

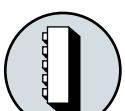
## Reference Gages

### Universal Height Master SERIES 515 — Usable in Vertical and Horizontal Orientations

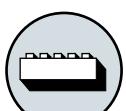
- The Universal Height Master is designed for both vertical and horizontal orientation, providing a wide range of applications such as accuracy checking of machine tool table movements.
- Analog display by the built-in counter – the appearance and specifications are the same as **515-322**.  
(Refer to page 01-37 for details)



515-520



Vertical orientation



Horizontal orientation



Riser block



#### Typical application



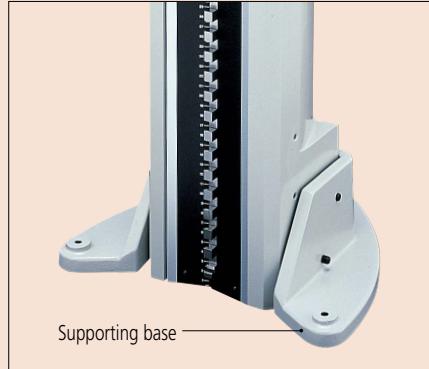
Using in horizontal orientation

#### Optional Accessories

Supporting base

**900574** (Dedicated for the Universal Height Master. Provided for **515-523** and **515-513** as standard.)

- Stable vertical orientation is available.



#### SPECIFICATIONS

##### Metric

Code No.	515-520	515-523
Range (H)	5 < H ≤ 610 mm	5 < H ≤ 1010 mm
Graduation (analog scale)		0.001 mm
Block step		10 mm (straight)
Micrometer adjustment		20 mm
Micrometer feed		0.5 mm/rev
H ≤ 310 mm		±1.5 µm
Block pitch accuracy	310 < H ≤ 610 mm	±2.5 µm
	610 < H ≤ 1010 mm	—
Parallelism of blocks	H ≤ 610 mm	1.5 µm
	610 < H ≤ 1010 mm	—
Feed error		±1.2 µm
Retrace error		1.2 µm
Mass	42 kg	63.5 kg

##### Inch

Code No.	515-512	515-510	515-513
Range (H)	0.2 in < H ≤ 18.2 in	0.2 in < H ≤ 24.2 in	0.2 in < H ≤ 40.2 in
Graduation (analog scale)		0.00001 in	
Block step		0.5 in (straight)	
Micrometer adjustment		1 in	
Micrometer feed		0.025 in/rev	
H ≤ 12 in		±50 µin	
Block pitch accuracy	12 in < H ≤ 24 in	—	±100 µin
	24 in < H ≤ 40 in	—	±150 µin
Parallelism of blocks	H ≤ 24 in	60 µin	
	24 in < H ≤ 40 in	—	80 µin
Feed error		±40 µin	±60 µin
Retrace error		40 µin	60 µin
Mass	42 kg	63.5 kg	

Note 1: The block pitch accuracy and the parallelism of blocks are relative to the main unit reference surface.

Note 2: Supplied with a wooden storage case as standard.