

Reference Gages

Length Standards Brought to You by Mitutoyo

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.



515-520

- Analog display by the built-in counter – the appearance and specifications are the same as model **515-322**. (Refer to Page E-35 for details)

SPECIFICATIONS

Metric		
Order No.	515-520	515-523
Range (H)	$5 < H \leq 610$ mm	$5 < H \leq 1010$ mm
Graduation (analog scale)	0.001 mm	
Block step	10 mm (straight)	
Micrometer adjustment	20 mm	
Micrometer feed	0.5 mm/rev	
Block pitch accuracy	$H \leq 310$ mm	± 1.5 μ m
	$310 < H \leq 610$ mm	± 2.5 μ m
	$610 < H \leq 1010$ mm	± 3.5 μ m
Parallelism of blocks	$H \leq 610$ mm	1.5 μ m
	$610 < H \leq 1010$ mm	—
Feed error	± 1.2 μ m	± 1.5 μ m
Retrace error	1.2 μ m	1.5 μ m
Mass	42 kg	63.5 kg

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

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

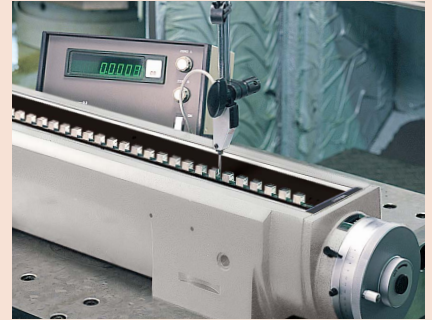
Inch			
Order No.	515-512	515-510	515-513
Range (H)	0.2 in $< H \leq 18.2$ in	0.2 in $< H \leq 24.2$ in	0.2 in $< H \leq 40.2$ in
Graduation (analog scale)	0.00001 in		
Block step	0.5 in (straight)		
Micrometer adjustment	1 in		
Micrometer feed	0.025 in/rev		
Block pitch accuracy	$H \leq 12$ in	± 50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

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

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



An inspection certificate is supplied as standard. Refer to page U-11 for details.

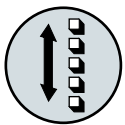
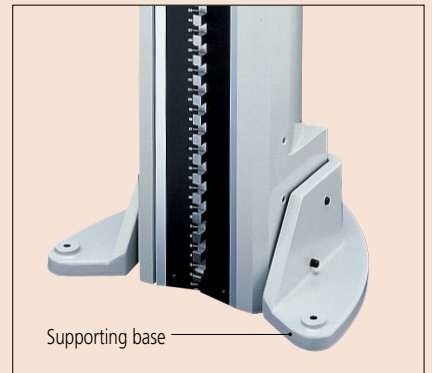


Typical application using in horizontal orientation

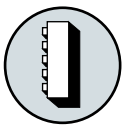
Optional Accessories

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

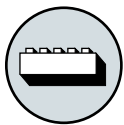
- Stable vertical orientation is available.



Single-row 10 mm blocks (movable)



Vertical orientation



Horizontal orientation



Riser block