

# H117N1M4 STAGE

## Motorized high performance stage for Nikon MA200

The H117N1M4 inverted stage is designed for use with the Nikon MA200.

The flat top design facilitates easy sample loading of large or irregular samples. Featuring Prior's patented Intelligent Scanning Technology (IST) to optimize stage accuracy, linearity and other performance characteristics, the H117N1M4 is ideal for high precision industrial imaging or long distance image stitching operations.

Whilst it is typically configured with a 1mm pitch ballscrew and 400 step motor for maximum resolution, alternative drive configurations focusing on speed may be available depending on your region.



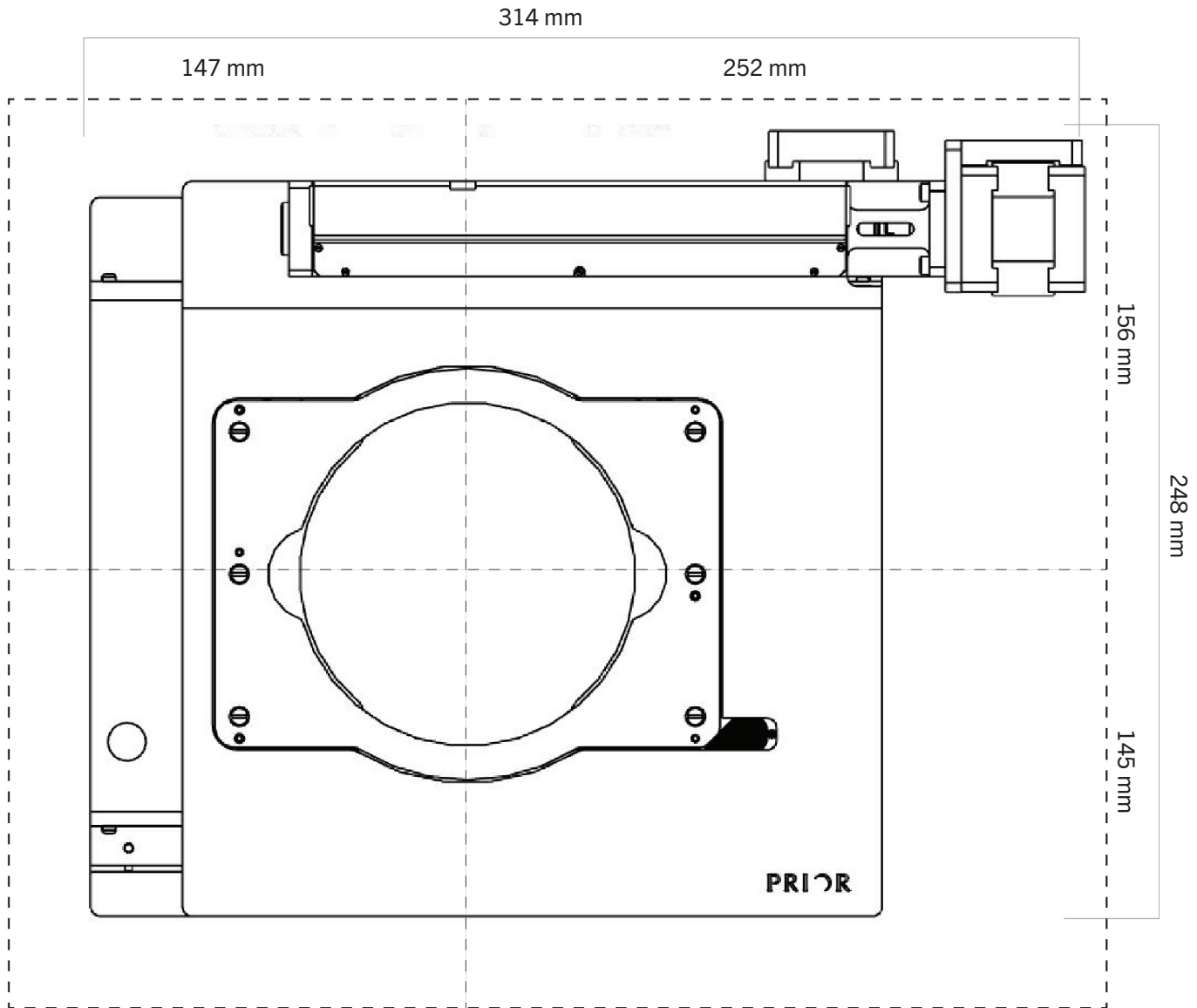
### Key Features

- Compatible with Nikon MA200 and NIS elements software (appropriate package required).
- Compatible with Nikon ring insert.
- Optimized for resolution and repeatability.
- Intelligent Scanning Technology™ (U.S. Patent 7,330,307).
- High load capacity.

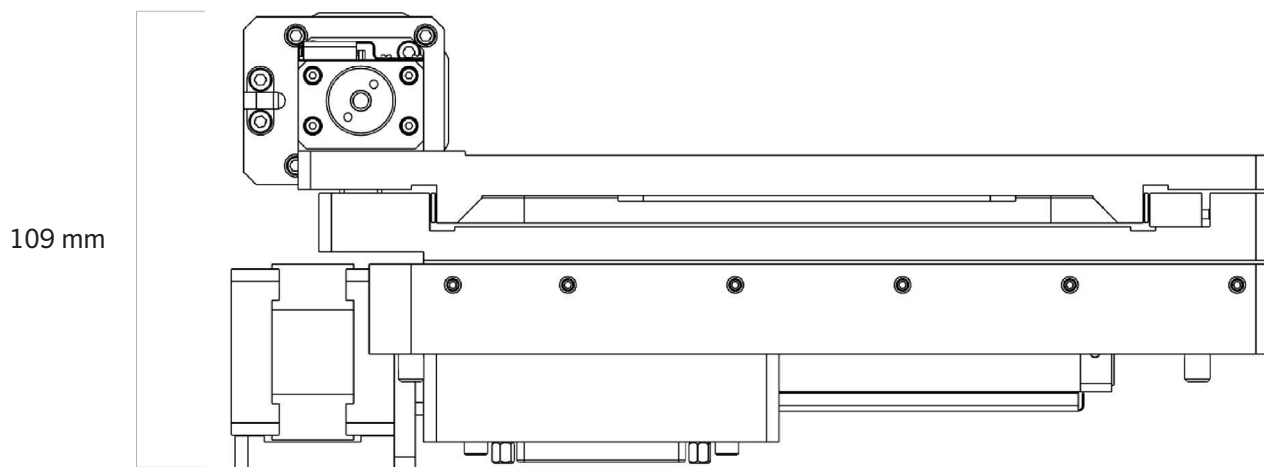
### Applications

- Metrology
- Component inspection
- Industrial research and development

## Dimensions\*



\*Outer dimensions are the maximum footprint of the stage when at the limits of travel.



## Specifications

	<b>H117N1M4</b>	<b>H117E1M4</b>
Travel range	114 mm x 75 mm	114 mm x 75 mm
Unidirectional repeatability <sup>1</sup>	<0.6 µm	<0.6 µm
Bidirectional repeatability <sup>1</sup>	<2.3 µm	<2.0 µm
Metric accuracy <sup>1</sup>	0.1 µm/mm	0.1 µm/mm
Full travel metric accuracy <sup>1</sup>	<7.6 µm	<7.6 µm
Resolution <sup>2</sup>	0.01 µm	0.1 µm
Squareness <sup>1</sup>	<35 arcsec	30 arcsec
Maximum velocity <sup>3</sup>	15 mm/s	15 mm/s
Maximum load	10 kg	10 kg
Encoders	No	0.1 µm linear encoders
Motor type	400 step	400 step
Screw pitch	1 mm	1 mm
Weight	5 kg	5kg

1. As per Prior Scientific's test methodology, typical value.

2. Defined as the minimum motor step resolution for non-encoded stages, defined as the encoder resolution for encoded stages.

3. Defined as 2.5x the default velocity, true maximum velocity is dependent on sample mass.

## Ordering Information

Part Number	Description
H117N1M4	Flat top ProScan® stage for Nikon MA200 with travel range 114 x 75 mm, 1 mm pitch ball screw and 400 step motors.
H117E1M4	Flat top ProScan® stage for Nikon MA200 with travel range 114 x 75 mm, 1 mm pitch ball screw and 400 step motors. Encoded with 0.1 µm linear encoders.

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