

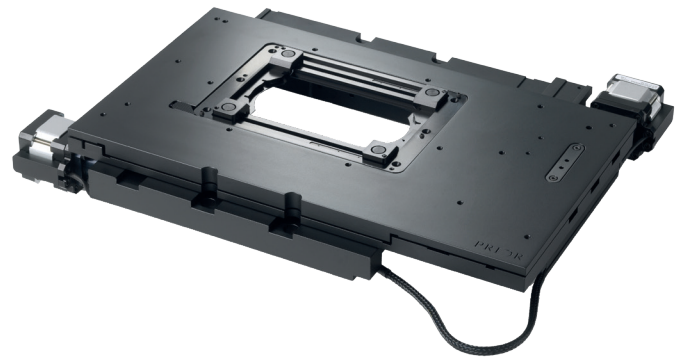
# H117 stage

## Motorized Precision Stage for Inverted Microscopes

The H117 is a precise, reliable and repeatable stage ideal for a wide range of applications and compatible with a vast range of inverted microscopes. Controlled via Prior's ProScan® III system, the H117 offers the end user the specifications needed to achieve exceptionally high quality imaging. By automating the microscope stage, the end user increases the speed of image collection, can accurately image exact regions of the sample, and program in specific stage movements. Stage automation also significantly decreases the risk of fatigue, strain injuries, and operator error.

### Precise:

- $\pm 0.2 \mu\text{m}$  mean uni-directional repeatability
- $0.059 \mu\text{m}/\text{mm}$  average metric accuracy
- $0.01 \mu\text{m}$  resolution
- Intelligent Scanning Technology (IST) increases accuracy of movement
- Anti-backlash mechanism as standard
- Linear encoders can be added to further increase accuracy



### Versatile:

- Large, flat top surface area and travel range (114 x 75 mm)
- Suggested maximum speed of 15 mm/s
- Limit switches allow stage movement to be constrained if required to avoid collisions
- Fits to almost all common inverted microscopes from Nikon, Olympus, Zeiss and Leica
- Control via ProScan® III means stage can be controlled by almost any commercial available imaging software package



### COMPATIBLE\* WITH

- Olympus IX73/83 series microscopes
- Olympus IX71/81 series microscopes
- Nikon Ti and Ti2 series microscopes
- Nikon MA200 series microscopes
- Zeiss Axiovert series microscopes
- Zeiss AxioObserver series microscopes
- Leica DMI 3000, 4000, 5000 and 6000B series microscopes
- Leica DMI8 series microscopes
- Prior FB series focus blocks
- Contact Prior for information on non-standard applications - we might still be able to mount it!

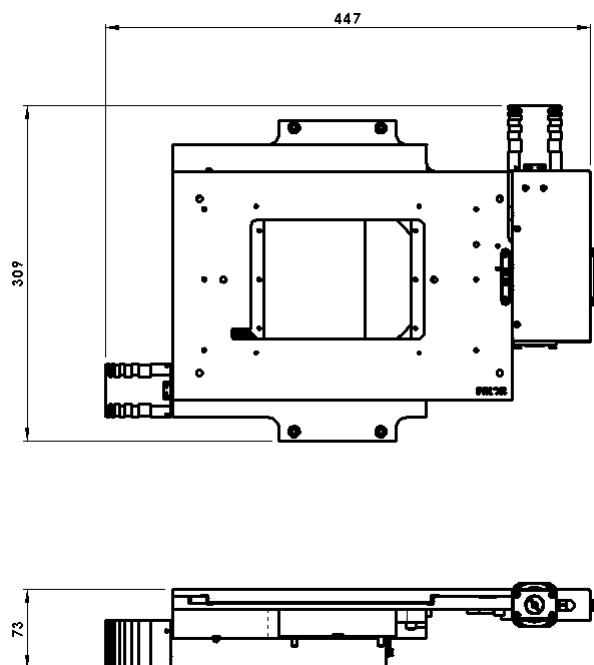
# H117

Motorized Precision Stage for Inverted Microscopes

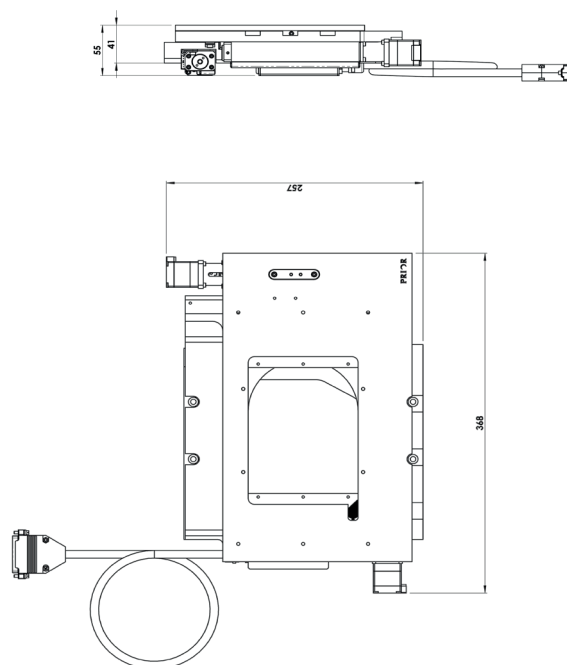
More to Prior than meets the eye



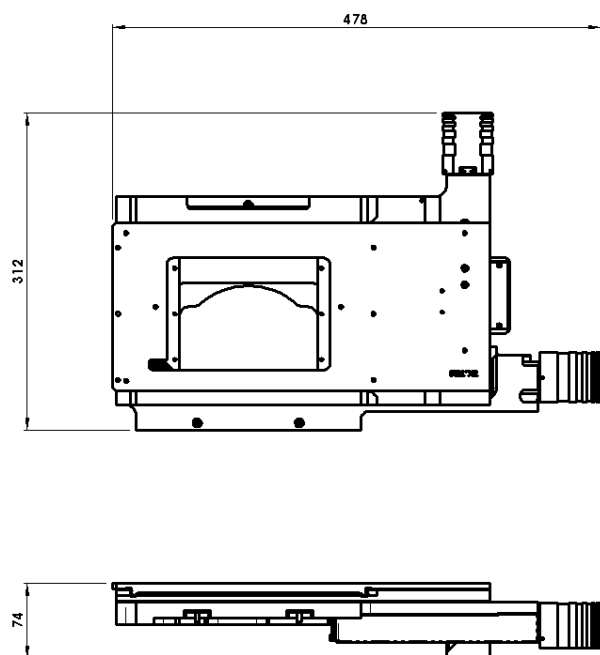
Nikon



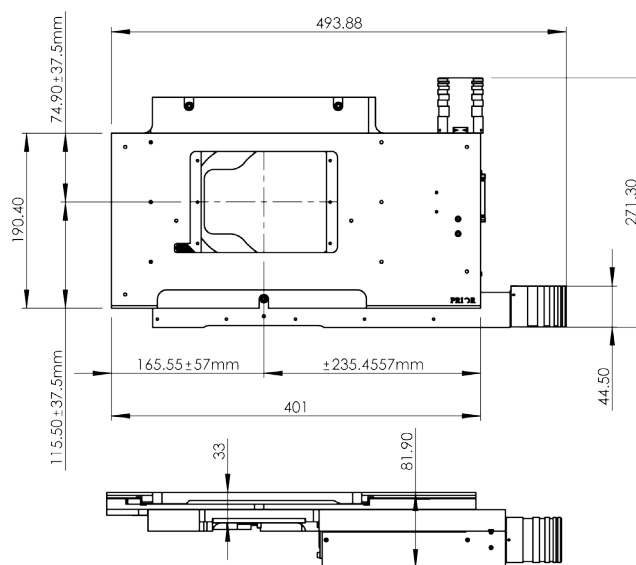
Olympus



Zeiss



Leica



# H117

## Motorized Precision Stage for Inverted Microscopes

### SPECIFICATION S

| PART NUMBER                              | H117P1## | H117E1## |
|------------------------------------------|----------|----------|
| Mean uni-directional repeatability* (um) | 0.2      | 0.2      |
| Resolution (nm)                          | 0.01     | 0.01     |
| Suggested max speed (mm/s)               | 15       | 15       |
| Average metric accuracy** (um/mm)        | 0.059    | 0.046    |
| Maximum travel range (mm)                | 114 x 75 | 114 x 75 |
| Maximum load (kg)                        | 10       | 10       |
| Squareness (arc seconds)                 | 30       | 30       |
| Ball screw pitch (mm)                    | 1        | 1        |
| Motor type (SPR***)                      | 400      | 400      |
| Encoders                                 | no       | Yes      |

Note that these specifications were obtained via the Prior method of testing using a Prior controller.

A # indicates at what point the microscope code should be inserted; e.g. H117E1NN or H117P1N4. Note that other stages are also available - contact Prior scientific for more information.

\*Based on performance with the IST enabled measured over the full range of travel.

\*\*Using a Prior ProScan controller with backlash correction enabled; all repeatability is uni directional.

\*\*\*Steps per Revolution of Motor

### ORDERING INFORMATION

| MICROSCOPE             | H117 STAGE | ENCODED H117 STAGE |
|------------------------|------------|--------------------|
| Olympus IX71/73/83     | H117P1XD   | H117E1XD           |
| Olympus IX81           | H117P1I4   | H117E1I4           |
| Nikon MA200            | H117N1M4   | H117E1M4           |
| Nikon Ti/Ti2           | H117P1NN   | H117E1NN           |
| Zeiss Axiovert         | H117P1X4   | H117E1X4           |
| Zeiss AxioObserver     | H117P1X4   | H117E1X4           |
| Leica DMI /DMi8 series | H117P1D4   | H117E1D4           |

Please contact Prior Scientific before ordering and confirm the microscope before placing an order.

This is not an exhaustive list, please contact Prior if you have a rarer or non standard microscope, or do not wish to mount the H117 on a microscope.

### WORLDWIDE DISTRIBUTION



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