

HWL6AL12

Motorised semi-conductor wafer inspection shuttle stage for
Olympus wafer handling systems



The Prior Scientific motorised shuttle stage is designed to be used for wafer inspection, using the Olympus AL120 wafer handling systems. The stage greatly reduces operator error and fatigue, whilst increasing the rate at which wafers are inspected.

The HWL6AL12 automatically loads and unloads wafers. When operating, the shuttle system automatically moves to the correct load position and activates the loader switch, notifying the loader that the wafer chuck is ready to receive the wafer. After transfer to the shuttle, the shuttle is retracted, allowing inspection. The stage allows either manual inspection using a joystick, or a pre-programmed pattern for wholly automated inspection.

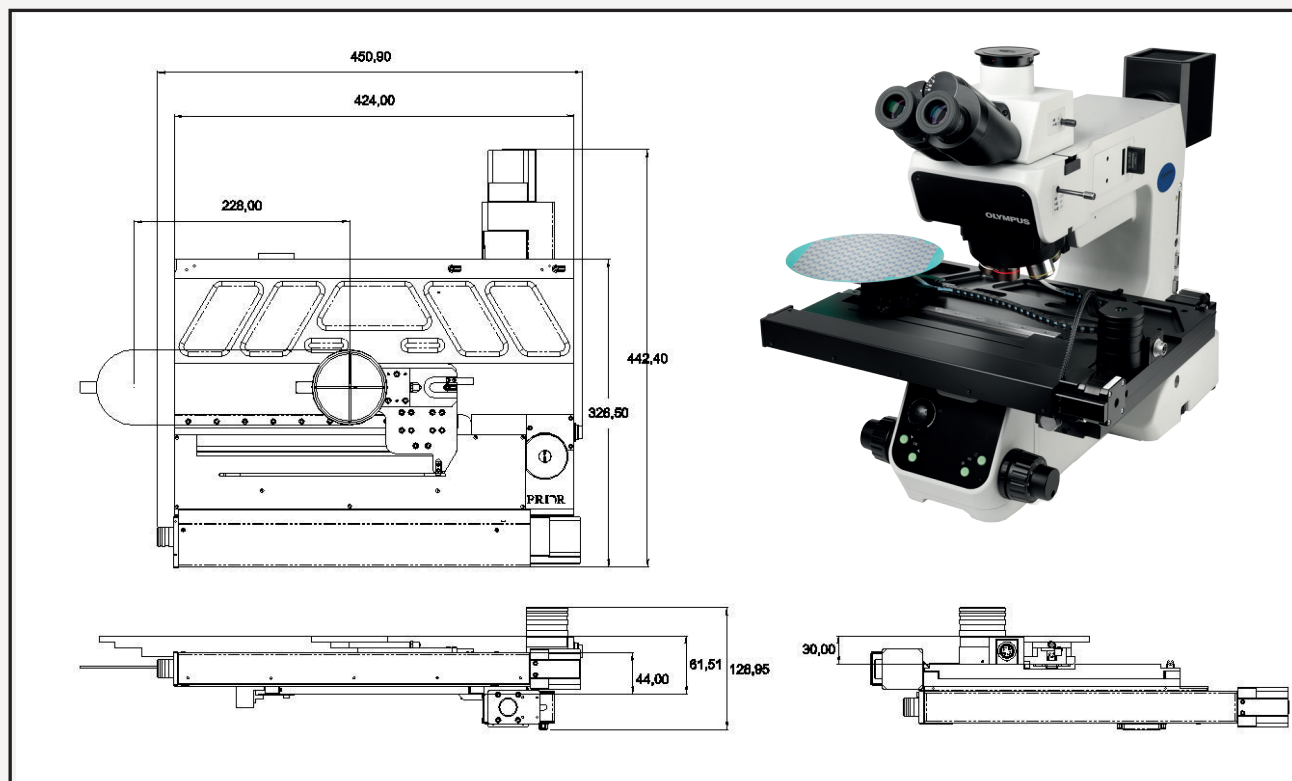
The HWL6AL12 has a large travel range, coupled with superb repeatability and resolution and, used in conjunction with Prior's ProScan™ III system, ensures accuracy, precision, minimal error and ultimately a far more effective wafer inspection process.

- Travel range of 250 x 210 mm
- Resolution of 0.04 μm
- Repeatability of $\pm 0.2 \mu\text{m}$
- Automatically loads and unloads wafers
- Compatible with the ProScan™ III system and Olympus AL120 wafer handling systems.

H116SPN

Motorised semi-conductor wafer shuttle stage for Nikon wafer handling systems

Dimensions



Specifications

Feature	Specification
Bi-directional repeatability*	$\pm 1.3 \mu\text{m}$
Uni-directional repeatability*	$\pm 0.2 \mu\text{m}$
Minimum step size (resolution)	0.04 μm
Recommended speed	40 mm s^{-1}
Maximum travel range	250 x 210 mm
Ball screw pitch	2 mm
Motor type**	200 SPR
Weight	9 kg

To obtain these results requires the use of a Prior ProScan™ III (or above) controller. Results obtained via the Prior method of testing.

* Average performance with a ProScan™ III controller with backlash correction enabled; all repeatability is uni-directional. **SPR - Full Steps Per Revolution of motor.

ProScan™ III System

Patented Intelligent Scanning Technology (IST)

The ProScan™ III controller and stage include as standard IST, which significantly improves the metric accuracy of the stage

Prior Interactive Control Centre

PS3J100 local control centre provides positional feedback and the ability to measure.



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