

ZAA

“Z” AXIS ACTUATOR

Fast, accurate and reliable Z Axis Actuation of individual objectives and lens changers for automated inspection systems

New

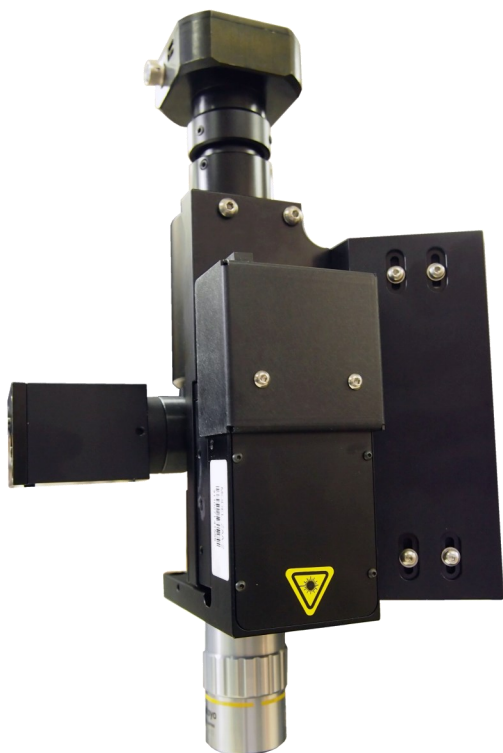


The “Z” Axis Actuator Family

WDI's line of Z Axis Actuators are versatile motorized “Z” focus motion systems which allow automated, rapid and accurate movement of either a single objective lens or linear and rotary objective lens changers. WDI has a Z Axis Actuator to suit every application including a long stroke model and a model designed to accommodate larger field of view objectives and cameras. All ZAA systems are precision designed to maintain a high level of accuracy, repeatability and reliability.

Designed For Speed

WDI designed the ZAA line with speed in mind. All ZAAs feature a powerful stepper motor designed to eliminate cogging while allowing rapid motion. All feature a maximum speed of 10mm/s and a maximum acceleration of 100 mm/s² making them ideal for fast tracking and imaging applications where focus speed is essential.



A new level of flexibility

The ZAA family integrates directly with WDI's Modular Microscopy System (MMS) components to allow unprecedented flexibility in how a system may be configured without having to sacrifice functionality. All models in the ZAA family can be paired with any WDI Autofocus Sensor to create an autonomous autofocus system.

Accuracy And Reliability

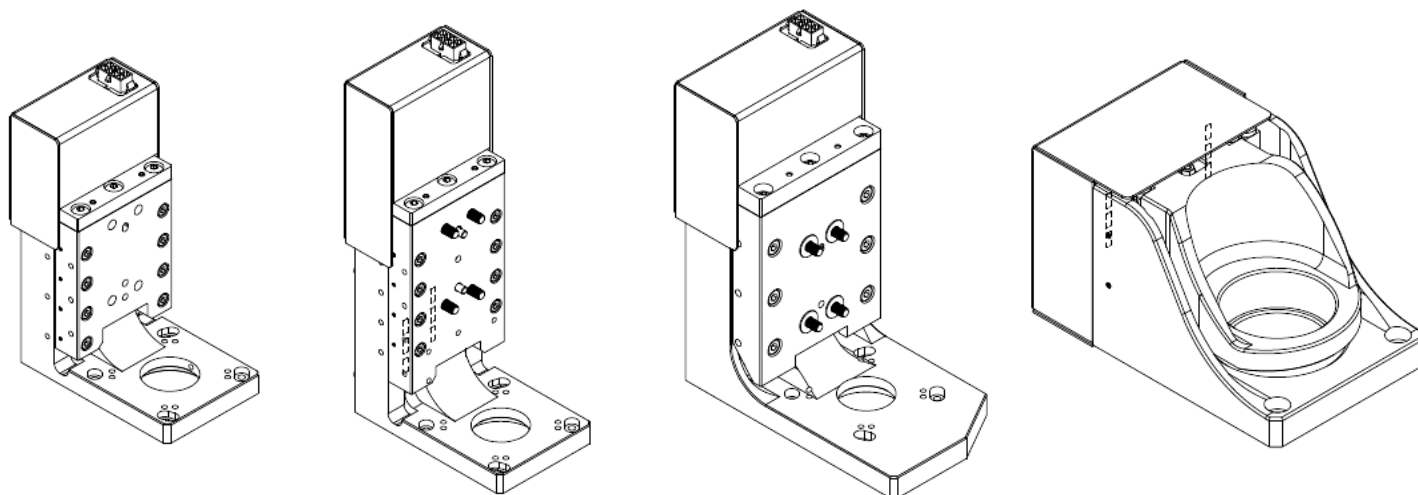
All ZAAs feature a powerful stepper motor complete with “anti-creep” cross rollers which ensures reliable, repeatable and stable performance over time. With a standard 10mm travel distance and 0.156µm per step resolution the ZAA is capable of achieving extremely accurate Z axis actuation making it suitable for the most demanding applications and manufacturing environments.

Practical and Powerful

Although designed for a variety of applications, all ZAAs are precision engineered with a small footprint and Cleanroom specifications. Each is supported by either WDI's Motion Controller “Z” (MCZ) or Multifunction Controller (MFC) making their integration into a complete system very



Parameters	ZAA-STD	ZAA-WIDE	ZAA-E10	ZAA-E20	ZAA-LFV
Motion Type	Stepper Motor				
Travel Stroke	10mm (± 5 mm)	10mm (± 5 mm)	10mm (± 5 mm)	20mm (± 10 mm)	8mm (± 4 mm)
Max Load	3.5kg				
Max Speed	10 mm/s				
Max Acceleration	100 mm/s ²				
Max Resolution	0.156 μ m/step				
Positional Feedback	ATF Sensor				
Motion Controller	MCZ, MFC				
# Of Phases	2				
Current per Phase	0.5A				
mStepping	Up to 32				
Application	MMS-Standard	LLC+ 3/4/5	MMS-LPT	MM-Standard	60mm Objective



is a world leader in the manufacturing and integration of industrial autofocus sensors and microscopy automation solutions for the biomedical, metrology, electronics, semiconductor and laser markets. WDI's success lies in an innovative culture and ability to optimize and adapt our technology to a customers' specific requirements by listening to their needs and gaining a deep understanding of their processes, applications and goals. WDI employs over 20 optical, electrical, mechanical and software engineers as well as scientists who are dedicated to servicing our customers. We have locations in Canada and Poland, as well as service centers in Taiwan and South Korea. Contact WDI today to see how we can help solve your microscopy automation needs.