



Lifetime
> 1 billion cycle



Peak force
120 N



Dynamics
Acceleration 30 g

AQUARIUS

Short Stroke Actuators

 For semiconductor applications

AQUARIUS is an actuator designed for applications where force, throughput, durability and reliability are required – all in a compact form factor. It is ideal for applications that require an independent Z-axis for testing handheld devices and offers optimal performance.

This is a versatile solution that can be used in various scenarios where precision and high dynamic are paramount. With a total stroke of 10 mm, it has a peak force of 120 N and a continuous force of 29.5 N, ensuring robust performance in a variety of tasks.

Its impressive acceleration capability of up to 30 g reaching a speed of up to 1 m/s further enhance its usefulness in dynamic applications. Then paired with the Accuret+ control unit, Tucana delivers best-in-class force control at the touch point, as well as precise position control without overshoot.

LONG LIFETIME

A mechanical design guarantees long-term friction behaviour, and minimises undesirable fluctuations in movement and settlement.

COMPACT DESIGN

With its small form factor, it offers space-saving benefits without compromising on performance, making it suitable for installations with limited space availability.

ENHANCED FORCE CONTROL PERFORMANCES

With capabilities to handle smaller nominal forces down to 0.5 N, improve force accuracy, reduce force overshoot, and increase acceleration, it delivers superior performance.

VERSATILE APPLICATION

Designed specifically for back-end semiconductor final inspection applications, it improves the handling of the tested component in various processes such as tray/tube/tray removal and deposition, transfer to/from the table, test bonding, visual inspection, and laser marking.

Integration example



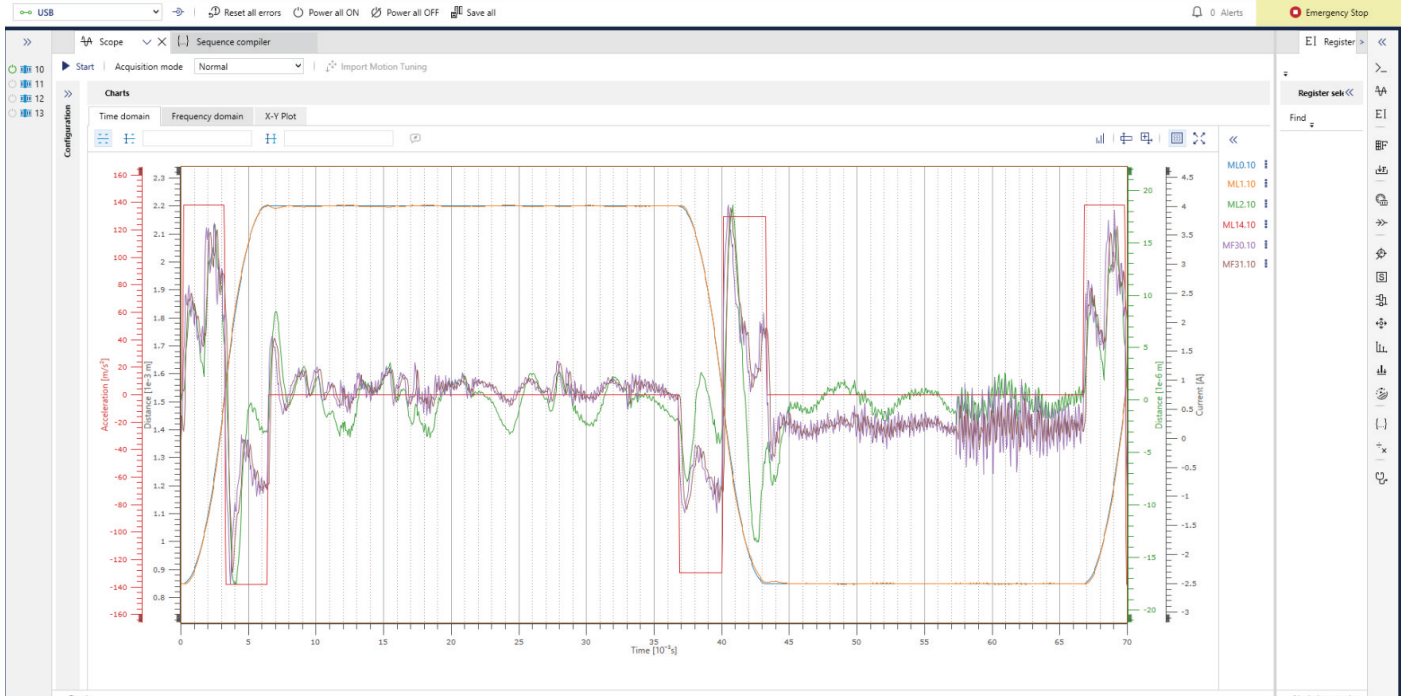
> Total stroke: 10 mm

> Speed: Up to 1 m/s

> Continuous Force: 31.4 N

> Move and settle time: 2.8 mm within $\pm 10 \mu\text{m}$ in 7 ms

Move and settle course



More info



Ver. 1.1