Download **PDF**

Lifetime
> 1 billion cycle

Peak force
214 N

Dynamics
Acceleration 40 g

AQUARIUS ST

Short Stroke Actuators

For semiconductor applications

AQUARIUS ST is the latest generation of our short stroke actuators specifically designed for "Test & Scan" turret applications. This series offers improved force control repeatability and higher throughput, which ultimately reduces the total cost of ownership of the machine.

Ihis 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 delivers a peak force of 214 N and a continuous force of 31.4 N, ensuring robust performance in various tasks.
Its impressive acceleration capability of up to 40 g reaching a speed of up to 1 m/s further enhance its usefulness in dynamic applications.

When 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.

OPTIMIZED DESIGN
A mechanically optimised 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.

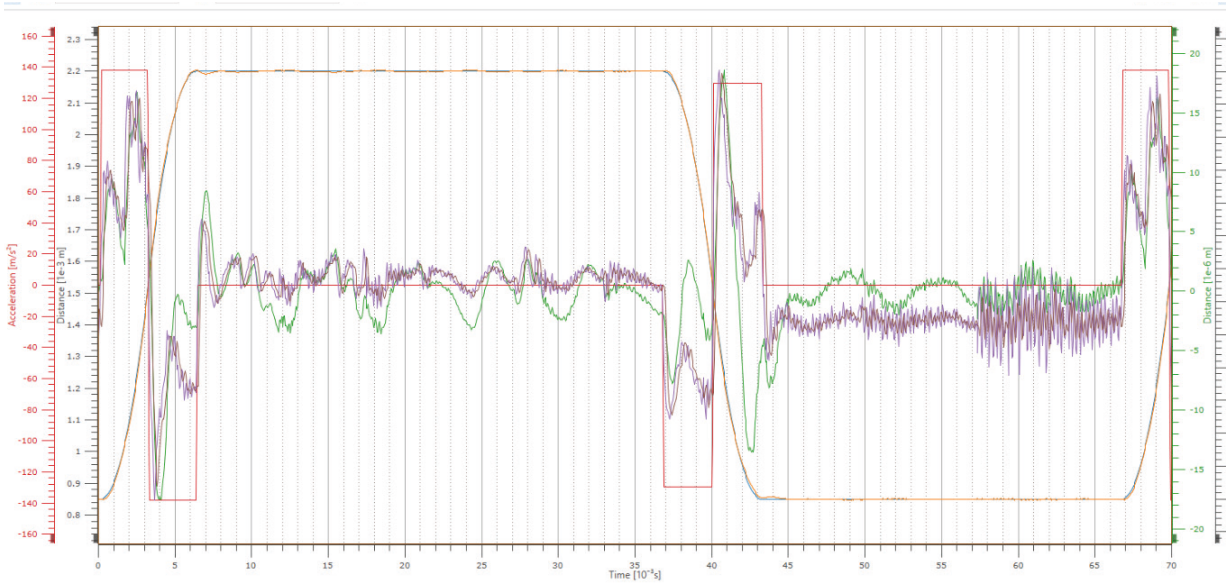
ENHANCED PERFORMANCE
With capabilities to handle smaller nominal forces down to 0.5 N, improve force accuracy, reduce force overshoot, and increase acceleration, it delivers superior performance.

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.

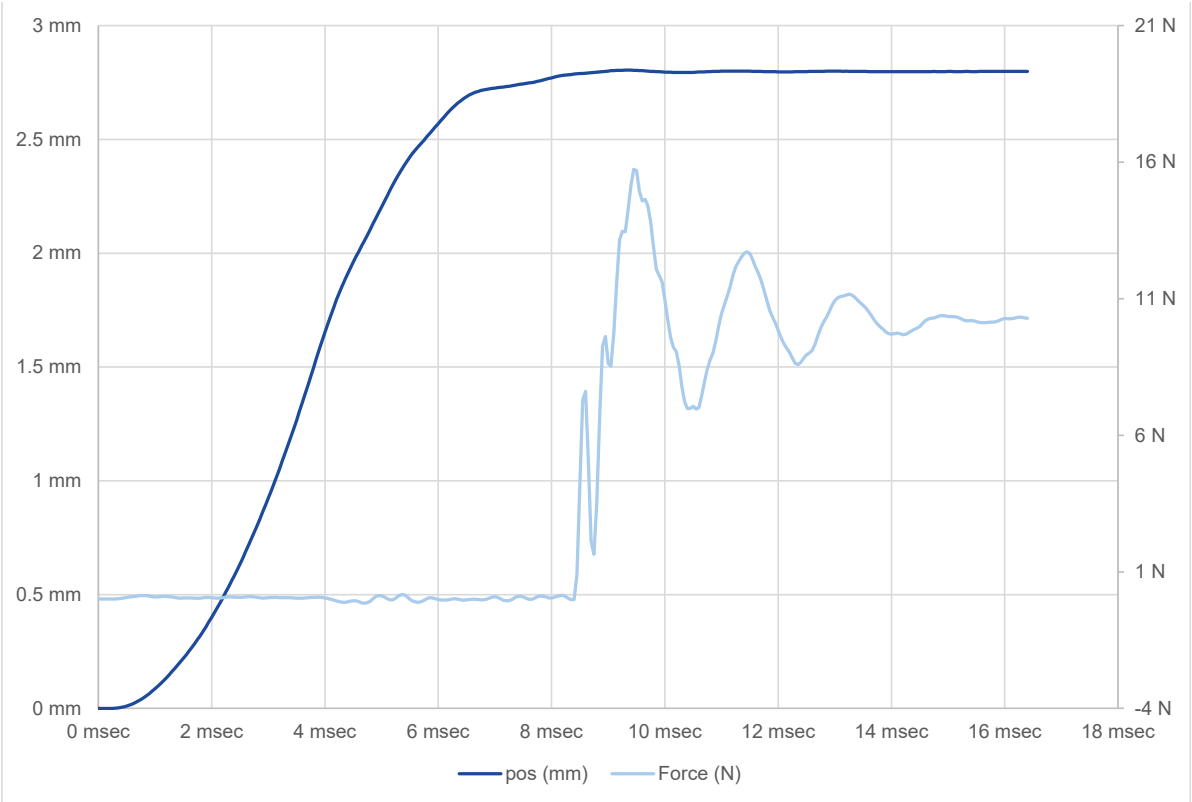
Integration example

- **Total stroke: 10 mm**
- **Continuous Force: 31.4 N**
- **Speed: Up to 1 m/s**
- **Move and settle time: 2.8 mm within ±10 µm in 7 ms**

Move and settle courbe
(acceleration/time)



AQUARIUS ST fast move
2,8mm



More info

PRECISELY. ETEL