

# Resistance Welding Electric Actuators



## ***ENGINEERED TO MOVE***

Diakont electric servo actuators produce the highest quality resistance welds, at maximal productivity levels. Significantly outperforming actuators that use ball screws or pneumatics, Diakont roller screw electric actuators with integrated motors provide best-in-class lifetime in a compact and lightweight package, resulting in optimum yield and weld quality.





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## Advantages and Benefits

Diakont's spot welding actuators provide the precision force needed for high-quality welding. And with fully integrated permanent magnet synchronous motors and high performance roller screws, Diakont actuators are the most compact and lightweight solution available.

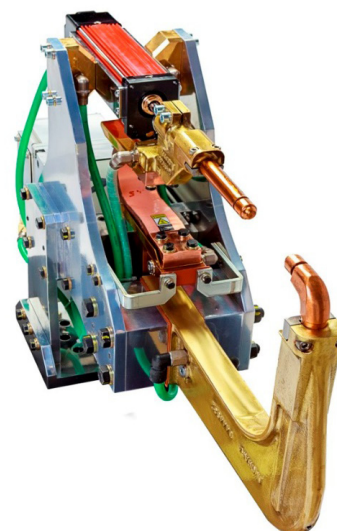
- Low power consumption – 10x less than pneumatics and 4x less than hydraulics
- Best-in-class lifetime – up to 30 million welding cycles
- Stable welding force – specialized motors with low cogging torque, and high temperature stability
- Compact and lightweight design with integrated roller screw and motor
- Advanced thermal management enclosure

## Best-in-Class Lifetime

In addition to offering unmatched quality, integrating a Diakont servo actuator into your weld gun or pedestal welder brings the peace of mind of unrivaled lifetime. Optimized planetary roller screw thread design, tight machining accuracy, and specialized hardening processes result in Diakont actuators' service lives outperforming those of their competitors in real-world installations, with upwards of 30 million lifetime welding cycles using forces up to 44kN. That's between 300% to 500% more lifetime than other welding solutions on the market.

## Standard Models

Model	Welding Force, lbf [N]	Pitch, inch/rev [mm/rev]	Maximum Speed, inch/s [mm/s]	Lifetime, weld cycles	Frame Size, inch [mm]	Length, inch [mm]	Weight, lb [kg]
DA99-15	2,473 [11,000]	0.2 [5]	9.8 [250]	>30,000,000	3.9 x 3.9 [99 x 99]	13.0 [330]	23.8 [10.8]
DA99-W25	4,946 [22,000]	0.2 [5]	11.8 [300]	>16,000,000	3.9 x 3.9 [99 x 99]	12.6 [320]	23.4 [10.6]
DA99-W212	1,978 [8,800]	0.5 [12.5]	29.5 [750]	>30,000,000	3.9 x 3.9 [99 x 99]	12.6 [320]	23.4 [10.6]
DA140-25	10,300 [44,600]	0.2 [5]	7.8 [200]	>10,000,000	5.5 x 5.5 [140 x 140]	17.3 [437.5]	67.3 [30.5]



## A Lightweight and Compact Solution

The weight of Diakont C-type and X-type actuators starts at 10.6 kg, making these products already one of the most lightweight solutions in the welding industry. For particularly lightweight servo guns, Diakont also offers reduced-weight actuators (starting at 5 kg). Application of these lightweight actuators and servo guns allows the final customer to deploy smaller robots together, resulting in a more efficient production space layout.

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