

RLA Series

Maximum Thrust for the Heaviest Web Handling Applications.

Key Features

- **Reverse parallel belt-and-pulley design** – belt, pulley, and rotary motor driving a ball or roller screw delivers the highest thrust in the Roll-2-Roll actuator lineup: 800–1,500 lbf
- **Load capacity up to 30,000 lb** – with precision linear bearings (15,000 lb with standard bearings); built for the heaviest unwind/rewind stands
- **Stroke lengths from 4 to 12 inches** – available in 4, 6, 8, and 12 in configurations to match specific guide frame geometry and web width requirements
- **Front and rear mounting options** – spherical bearing and clevis mounting at both ends accommodates misalignment under heavy loads
- **Powered by MC QD 1180 or SCU6x MxD** – 5.5–7 A motor current at 24/48 VDC (48 VDC preferred for maximum performance)
- **Off-shelf replacement** – standard pivot, rod eye, and clevis mounting options fit existing terminal guide frame designs

Benefits

- **Stop settling for underpowered actuators** – the RLA Series delivers 800–1,500 lbf of continuous thrust, enough to position the heaviest webs with precision
- **Handle every heavy application with one actuator family** – from 4-inch strokes on compact rewind stands to 12-inch strokes on wide-web shifting systems, no mixing actuator brands
- **Eliminate drift under maximum load** – ball and roller screw drives maintain positioning accuracy even at full capacity; no creep, no gradual misalignment
- **Built for the toughest environments** – IP54 protection, heavy-duty bearings, and robust construction perform in paper mills, steel processing, and heavy converting operations

Specifications

| Specification | Value |
|---|---|
| Thrust Range | 800 lbf to 1,500 lbf (3,560 N to 6,670 N) |
| Load Capacity (Standard Bearings) | Up to 15,000 lb |
| Load Capacity (Precision Linear Bearings) | Up to 30,000 lb |
| Stroke Length Options | 4 in / 6 in / 8 in / 12 in (100–300 mm) |
| Maximum Speed | 0.75–2 in/sec (19–51 mm/sec) |
| Drive Voltage | 24/48 VDC (48 VDC preferred) |
| Motor Current | 5.5–7 A |
| Power Source | MC QD 1180 or SCU6x MxD |
| Motor Type | Brushless Bi-polar Stepper, 1.8° resolution |
| Actuator Type | Belt + Ball/Roller Screw |
| Mounting Options | Pivot / Rod Eye / Clevis |
| Terminal Web Guide | Yes |
| Intermediate Web Guide | Yes |
| Off-Shelf Replacement | Yes |

Applications

- Heavy rewind stands — positioning for rewind/unwind systems handling rolls up to 30,000 lb
- Large roll shifting — lateral movement of heavy roll stands and shifting frames
- Unwind/rewind systems — terminal web guiding at the entry and exit of high-capacity converting lines
- High-load terminal guides for paper mills, steel processing, and heavy converting operations

Supporting Documentation

Manuals (2)

- Servo Center Servo Installation
- Unwind/Rewind Installation Checklist

2D Drawings (9)

- BLA-0xx-0600-TG 2D Drawing
- LHS-005-0125-LP: 2D Drawing (dxf)
- LHS-005-0400-LP: 2D Drawing (dxf)
- LHS-005-0xxx-LP: 2D Drawing (pdf)
- LHS-015-0150-WG: 2D Drawing (pdf)
- LHS-020-0xxx-RF: 2D Drawing (dxf)
- LHS-020-0xxx-RF: 2D Drawing (pdf)
- LHS-030-xxxx-RF: 2D Drawing (pdf)
- RLA-050-0600-TG: 2D Drawing (pdf)

3D Models (1)

- RLA-050-0600-TG

Wiring Diagrams (5)

- Power Supply Regen Clamp Wiring
- SCU5 MD Wiring with MC QD 1141/1140/1240 + Web Guide Actuator
- SCU5 MD Wiring with MC QD 1180/1181/1211/1230/1231/1260 + Regen Clamp + Unwind/Rewind Actuator
- SCU5 MD Wiring with MC QD 1180/1181/1211/1230/1231/1260 + Web Guide Actuator
- SCU6x MxD Wiring Diagram with Unwind/Rewind (Small Load)



Scan for datasheets, 3D models & full documentation

<https://r2r.tech/products/actuators/rla>

Ready to Get Started?

Contact our experts to discuss how this product fits your application.

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