



DATASHEET

RA MINI IN-LINE ACTUATOR SERIES



COMPACT SIZE



FAST



HIGH LIFTING
FORCE



EASY
MOUNTING



ELEGANT
DESIGN



LIMIT
SWITCHES



MAINTENANCE
FREE



OVERCURRENT
PROTECTION



QUIET
OPERATION



CUSTOMIZABLE

SMALL BUT POWERFUL

The RA MINI actuator is specially designed with a small overall dimension along with a high power, offering a perfect solution for a wide range of applications where the space is of the essence.

Its straight sleek lines and anodized black finish give it a modern and elegant appeal easy to include in any design.

The actuator offers multiple configuration and control options to suit different needs.

Main Features

- Power supply: 12 VDC
- Max. peak load: 20 N (Hi-speed), 45 N (Standard), 70 N (Hi-force).
- Max. speed: 14.7 mm/s (High-speed), 5.6 mm/s (Standard), 5.1 mm/s (High-thrust).
- Min. built-in dimension: 57.5 mm + stroke
- Strokes: 10 - 100 mm
- Duty cycle: 30% (6 min. in use followed by 14 min. in rest)
- Aluminum housing
- Stainless steel piston rod
- Overcurrent protection: 116 mA
- Internal limit switching at stroke endpoints
- Protection class: IP54
- Standard color: anodized black

Applications

- *Battery-operated medical equipment*
- *Robotics*
- *UAV & drones*
- *Industrial automation*
- *Consumer appliances*
- *Safety equipment*
- *RC & Toys*
- *Household automation equipment*
- *Automotive*

Customizable

- *Stroke lengths*
- *Built-in dimensions*
- *Position control*
- *Anodized colors*
- *Connectors*
- *Cable lengths*
- *Front / rear brackets*

Technical Specifications

Specifications	High-speed gearbox (100:1)	Standard gearbox (210:1)	High-thrust gearbox (298:1)
Max. Peak Load	20 N at 9.0 mm/s	45 N at 3.5 mm/s	70 N at 3.5 mm/s
Rated Load	7.5 N at 12.5 mm/s	20 N at 4.7 mm/s	30 N at 4.5 mm/s
Max. Speed (no load)	14.7 mm/s	5.6 mm/s	5.1 mm/s
Max. Current	114 mA	76 mA	114 mA
Starting Current	200 mA	200 mA	200 mA
Overcurrent Protection	116 mA	116 mA	116 mA
Power Supply	12 VDC		
IP Rating	IP54		
Weight	45 g (30 mm stroke)		
Housing Material	Aluminum		
Rod Material	Polished Stainless Steel		
Color	Anodized black (RAL 9005)		
Operating Temperature	-10 °C to +40 °C		
Storage Temperature	-30 °C to +70 °C		
Duty Cycle	30 % (6 min out of 14 min)		
Noise (no load)	50 dB at 45 cm		
Backlash	0.1 mm		
Max. Side Force (30 mm extended)	50 N at 30 mm		
Internal Limit Switch	At stroke endpoints		
Lead	5 mm		

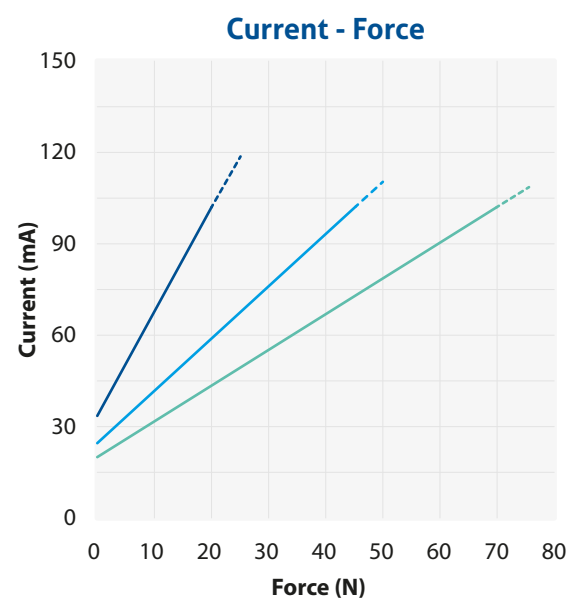
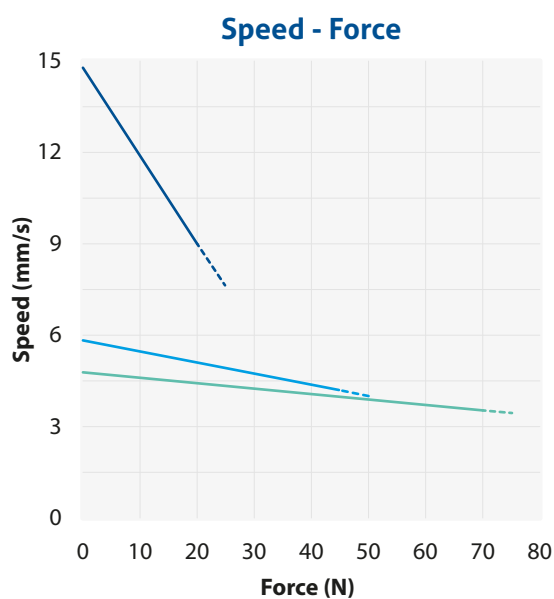


Overcurrent Protection

When the RA-MINI arrives to its fully extended or fully retracted positions, a limit switch automatically trips out the current, preventing the motor from any damage. In both stroke endpoints, the actuator will only move in the opposite direction.

When it is separated from either of its endpoints, it resumes its normal function, being able to move freely in either direction. In the event of an obstruction in the mechanism or an excessive load, the overcurrent protection feature will trip out the current thereby protecting the actuator.

Force, speed and current



- High speed gearbox (100:1)
- Standard gearbox (210:1)
- High thrust gearbox (298:1)

Use in the dashed area is not recommended.
The above figures are with a room temperature of 20°C.

Standard Configurations

Standard Options

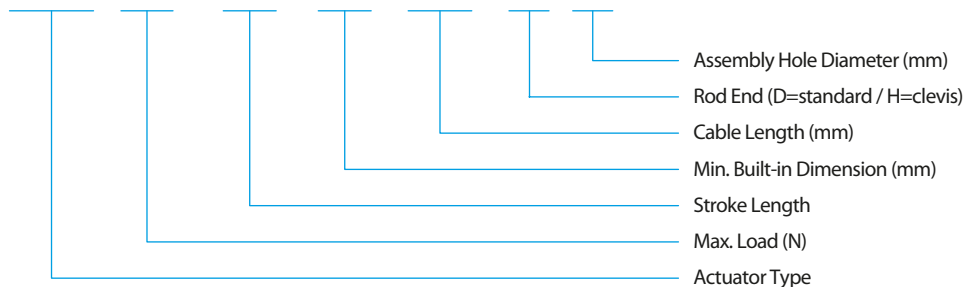
Stroke	30 / 100 mm
Min. Built-in Dimension	87.5 / 157.5 mm
Cable Length	350 mm
Mounting Holes	4.1 mm
Control	Limit switching at endpoints
Connector	Molex 39-01-3029
Color	Anodized black

Customizable upon request

- Stroke lengths
- Built-in dimensions
- Anodized colors
- Connectors
- Cable lengths
- Front/rear brackets

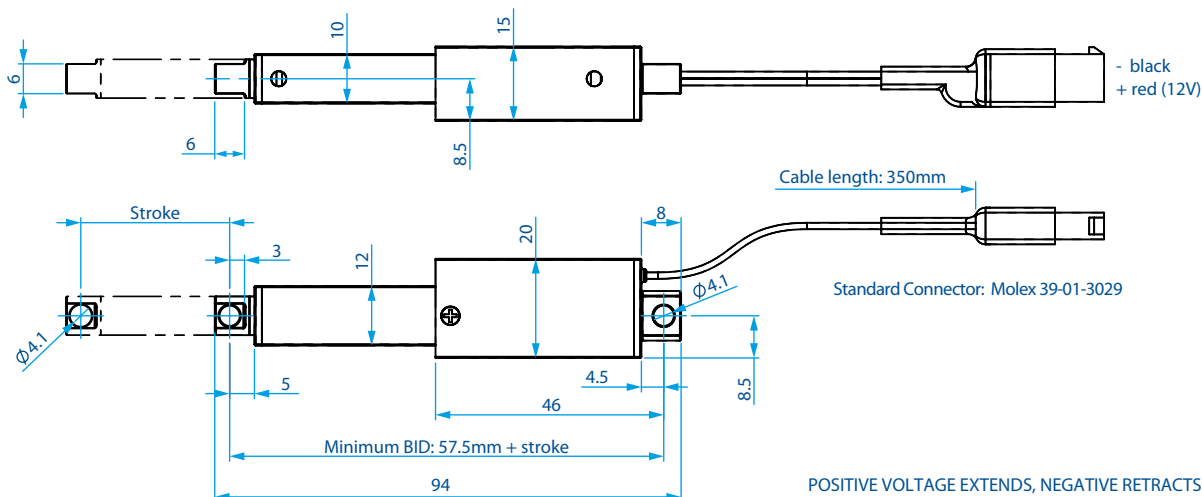
Ordering Example

RA MINI 45 . 30 . 87 . 350 . D 4



Please contact
info@regner.es
for customized
configurations.

Dimensions (mm)



Quality

Forging ahead to achieve high quality

- We apply high quality components, semi-automatic production and rigorous testing to verify and validate each motion control solution before leaving our premises. Our continuously audited management systems ensure optimized agile manufacturing. All these measures make for high quality products.

RA-MINI Quality control

- Every single RA-MINI goes through a strict quality control before leaving production in order to guarantee an optimum performance and durability.

Certifications

- ISO 9001 : 2008 *Quality management*
- ISO 14001 : 2004 *Environmental management system*
- ISO 13485 : 2012 *Medical devices*

Quiet
Safe
Durable
Easy
Efficient
Powerful
Elegant
Customizable

