



— DATASHEET —

RA47 IN-LINE ACTUATOR SERIES



COMPACT
SIZE



PRECISION
POSITION CONTROL



HIGH LIFTING
FORCE



EQUAL
PUSH / PULLFORCE



EASY
MOUNTING



ELEGANT
DESIGN



MAINTENANCE
FREE



BUILT-IN LIMIT
SWITCHES



HIGH INGRESS
PROTECTION



CUSTOMIZABLE

Accuracy & Performance

The RA47 is a high power density actuator that features a precise position feedback system. With a maximum thrust of 2500N, the RA47 includes a potentiometer to track position and limit switches for safe operation.

The RA47 has been specially conceived for applications where the actuator is part of the overall image. Its compactness, in-line configuration, stylish design and anodized aluminum all empower the RA-47 and increase the appeal of any device as opposed to standard actuators in a 90° or 180° motor configuration. In brief, design thinking for sleek applications by REGNER®.

Main Features

- Power supply: 24 VDC
- Max. load: 2500 N (push/pull)
- Max. speed: 3.5 mm/s
- Min. built-in dimension: 188 mm + stroke
- Limit switches at stroke endpoints.
- Position feedback supply voltage: 4.5 - 5.5 VDC
- Position feedback output voltage: 0.3-3.3 VDC \pm 3 %
- Position feedback resolution: infinite
- Aluminum housing
- Stainless steel piston rod
- Protection class: IP65

Applications

- Powered wheelchairs
- Battery-operated medical equipment
- Ergonomic medical furniture
- Robotics
- Safety equipment
- Household automation equipment
- Automotive
- Industrial automation

Customizable

- Stroke lengths
- Potentiometer output voltage
- Potentiometer Independant linearity
- Built-in dimensions
- Position control
- Anodized colors
- Connectors
- Cable lengths
- Front / rear brackets

Technical Specifications

Actuator Specifications

Max. Load	2500 N at 2 mm/s
Lead	1.5 mm
Max. Speed (No load)	3.5 mm/s
Max. Current	2.5 A
Starting Current	3 A
Power Supply	24 VDC
Limit switches	At strokes endpoints
Strokes	25 - 150 mm
Duty Cycle	10 % (2 min out of 18 min)
Lifetime	30.000 cycles at rated load

Mechanical Specifications

Weight	1250 g
Housing material	Aluminum
Rod Material	Polished stainless steel
Color	Anodized Black
Connector	Molex 39-01-2066

Environment Specifications

IP Rating	IP 65
Operating temperature	+5 °C to + 40 °C
Storage temperature	-30 °C to + 70 °C

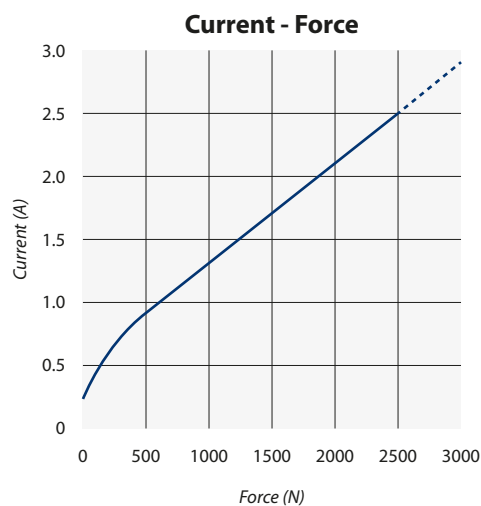
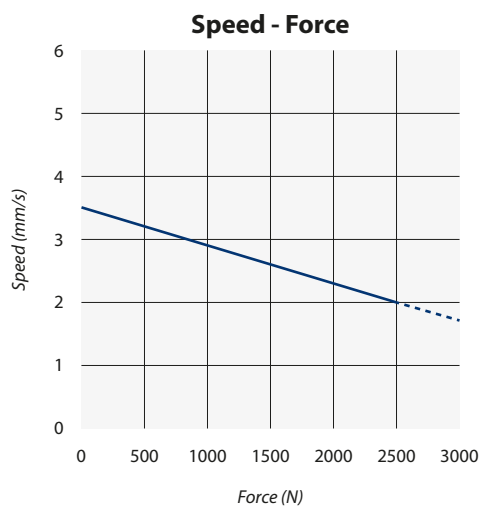
Position Feedback Specifications

Supply voltage	4.5 - 5.5 VDC
Output voltage	0.3-3.3 VDC \pm 3 %
Current consumption	< 2 mA
Resolution	Infinite
Independent Linearity	\pm 3 %



Force, speed and current

Force (N)	No load	500 N	1000 N	1500 N	2000 N	2500 N
Average Current (A)	0.2	0.9	1.3	1.7	2.1	2.5
Speed (mm/s)	3.5	3.2	2.9	2.6	2.2	2.0



Use in the dashed area is not recommended.

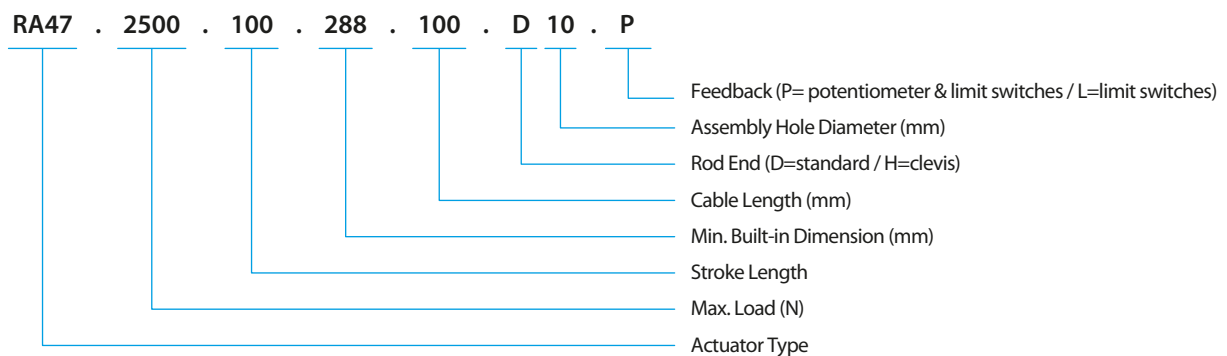
The above figures are with a room temperature of 20°C.

Standard Configurations

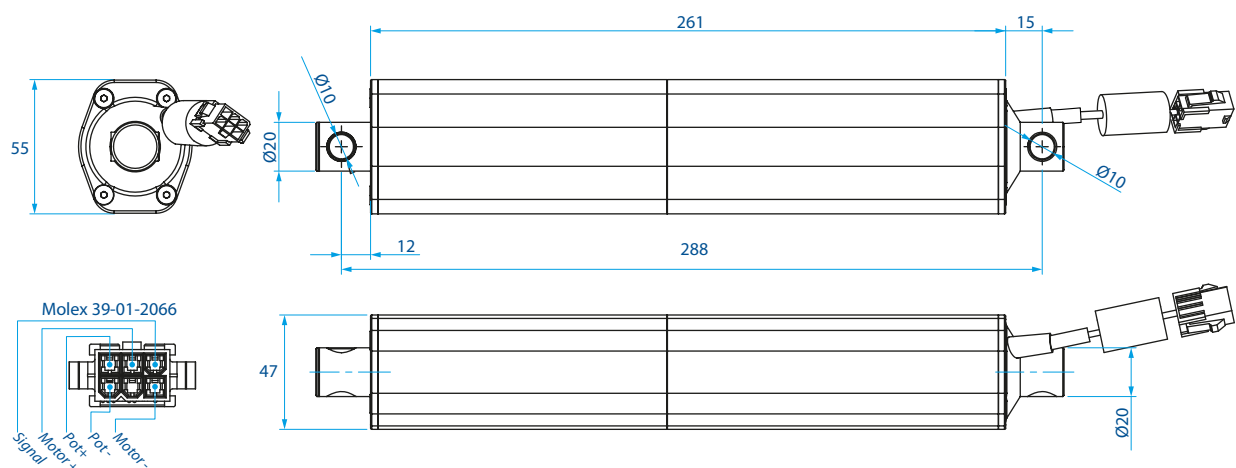
Please contact info@regner.es for customized configurations.

Standard options	Standard configuration	Custom configuration
Stroke	100 mm	25-150 mm
Min. Built-in Dimension	188 mm + stroke	Customized
Potentiometer output voltage	0.3 - 3.3 VDC \pm 3 %	Customized
Potentiometer Independent linearity	\pm 3 %	\pm 1 % or \pm 3 %
Feedback	Potentiometer & Limit switches	Limit switches only
Cable length	100 mm	Customized
Mounting holes	10.1 mm	Customized
Front bracket	Standard	Customized
Connector	Molex 39-01-2066	Customized
Color	Anodized black	Customized

Ordering Example



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 47 Quality control

- Every single RA47 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

