

RA-MINI ALU

In-line actuator series



High lifting force



High speed



Compact size



Limit switches



Elegant design



Easy installation



Overcurrent protection

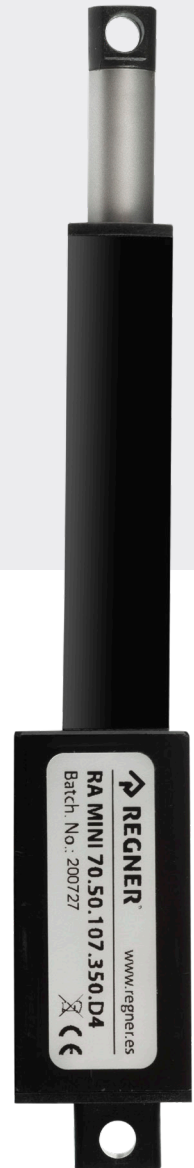


Maintenance free

Aluminium housing, powerful and ultracompact

The RA-MINI ALU is the perfect combination of **power, ultracompact design and high performance** for applications that require a tilting, lifting, retracting or pushing force of up to 70 N (15,74 lbf).

The true core of this high-tech device is its **powerful transmission system**, which offers high power and performance levels, ensuring reliable and accurate movement.



Main features



Powerful

Loads of up to 70 N
(15,74 lbf)



Fast

Up to 14,7 mm/s
(0,58 in/s)



Compact

Retracted length
of 57,5 mm + stroke
(2,26 lbf + stroke)



Resistant

IP54 rating
Aluminum housing
Stainless steel rod

General specifications

Stroke	30 50 100 mm	1,18 1,97 3,94 in
Max. load	70 N at 3,5 mm/s	15,74 lbf at 0,14 in/s
Max. speed (no load)	14,7 mm/s	0,57 in/s
Backlash	0,1 mm	0,004 in
Power supply	12 VDC	
Max. current	114 mA	
Starting current	200 mA	
Overcurrent protection	116 mA	
Integrated limit switch	At stroke end points	
Connector	Molex 39-01-3029	
IP Rating	IP54	
Retracted length	57,5 mm + stroke	2,26 in + stroke
Weight (with 30 mm / 1,97 in stroke)	45 g	1,59 oz
Housing material	Aluminium	
Rod material	Polished stainless steel	
Color	Anodized black (RAL 9005)	
Mounting holes diameter	4,1 mm	0,16 in
Cable length	350 mm	13,8 in
Operating temperature	-10°C to 40°C	14°F to 104°F
Storage temperature	-30°C to 70°C	22°F to 158°F
Duty cycle	30% (6 out of 20 min.)	
Noise (No load)	50 dB at 45 cm	50 dB at 17,7 in
Lead	5 mm	0,20 in
Max. side load (30 mm / 0,52 in stroke extended)	10 N	2,25 lbf



Overcurrent protection

In the event of an obstruction or an excessive load, the overcurrent protection feature will cut off the current to protect the actuator.



Limit switches

When the actuator reaches its fully extended or fully retracted position, an electronic limit switch automatically cuts off the current to prevent damage to the motor.

Position feedback potentiometer

Signal power supply	5 VDC
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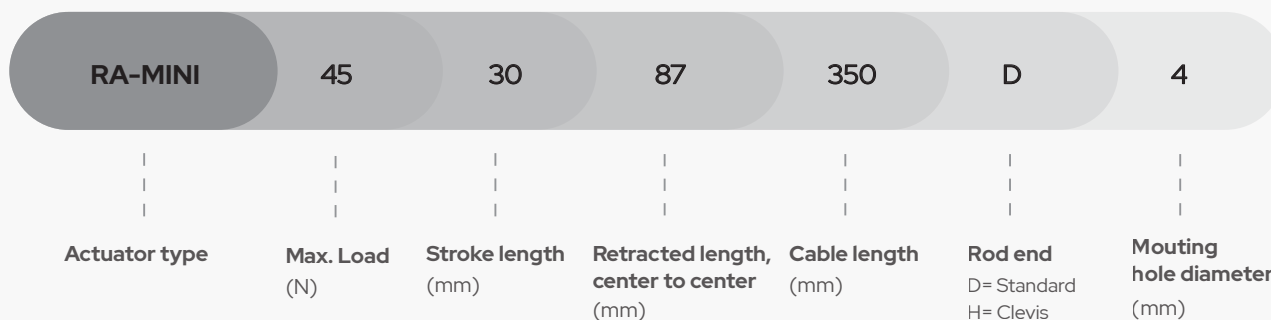
Max. Stroke voltage	5 V
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Min. Stroke voltage	0 V
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Preset configurations

Please, contact info@regner.es for customized configurations.

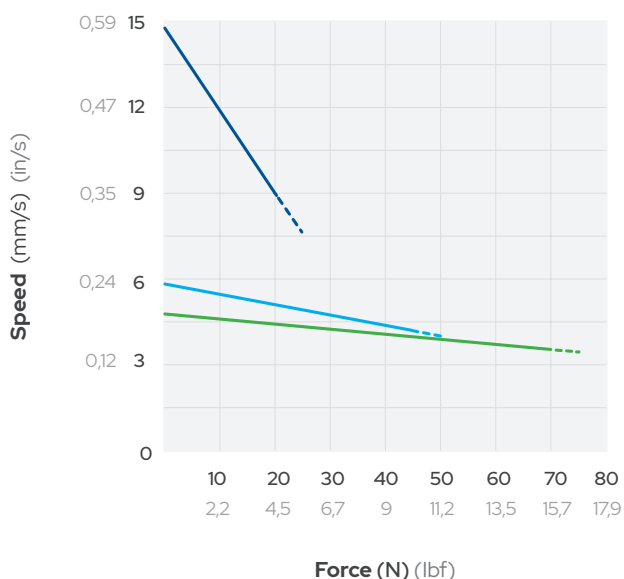
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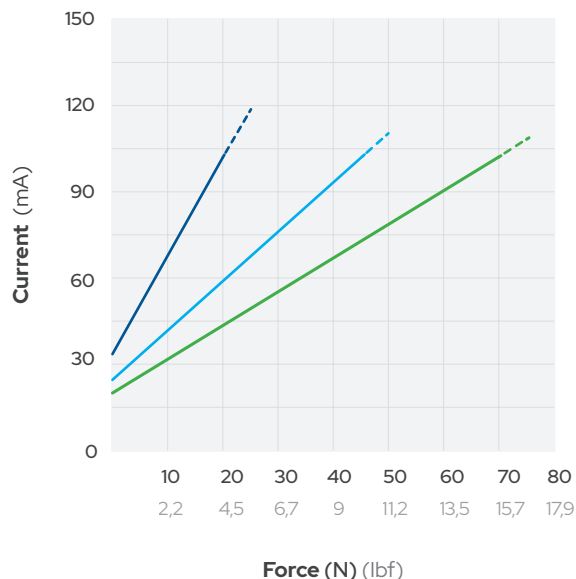
Force, speed and current

	Force (N) (lbf)	0 N 0 lbf	5 N 1,1 lbf	10 N 2,2 lbf	15 N 3,4 lbf	20 N 4,5 lbf	
RA-MINI High-speed reducer	Average current (mA)	33	50	70	85	100	
	Speed (mm/s) (in/s)	14,7 - 0,58	13,4 - 0,53	12,0 - 0,47	11,5 - 0,45	9,0 - 0,35	
	Force (N) (lbf)	0 N 0 lbf	10 N 2,2 lbf	20 N 4,5 lbf	30 N 6,7 lbf	40 N 9 lbf	45 N 10,1 lbf
RA-MINI Standard reducer	Average current (mA)	25	40	60	75	93	104
	Speed (mm/s) (in/s)	5,9 - 0,23	5,5 - 0,22	5,0 - 0,20	4,8 - 0,19	4,5 - 0,17	4,1 - 0,16
	Force (N) (lbf)	0 N 0 lbf	20 N 4,5 lbf	40 N 9 lbf	60 N 13,4 lbf	70 N 15,7 lbf	
RA-MINI High-force reducer	Average current (mA)	20	45	69	90	114	
	Speed (mm/s) (in/s)	4,6 - 0,18	4,5 - 0,17	4,2 - 0,16	4,0 - 0,15	3,6 - 0,14	

Speed - Force

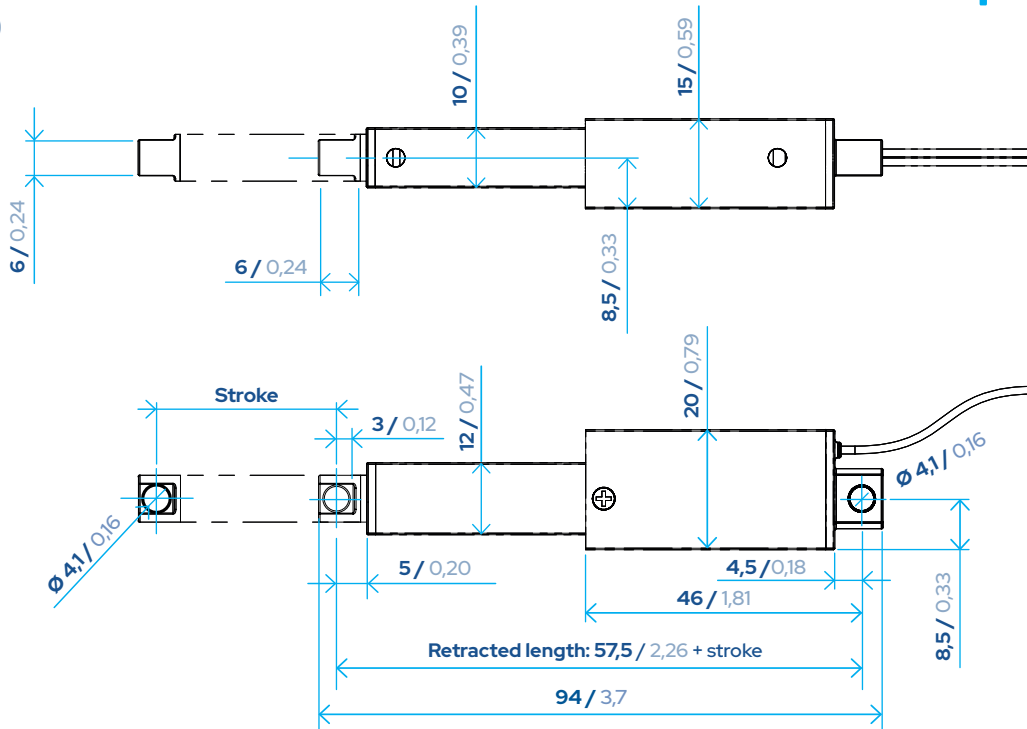


Current - Force



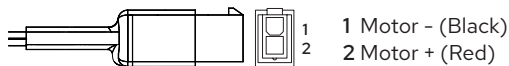
Use in the dashed area is not recommended.
The above values are with a room temperature of 20 °C / 68 °F.

Dimensions (mm) (in)



Connectors

Limit switches option

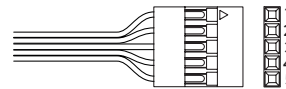


- 1 Motor - (Black)
- 2 Motor + (Red)

Molex 39-01-3029

Positive voltage extends, negative voltage retracts

Potentiometer option



- 1 Motor +
- 2 Motor -
- 3 Potentiometer -
- 4 Potentiometer +
- 5 Potentiometer signal

Harwin M20-1060500

Positive voltage extends, negative voltage retracts



Forging ahead to achieve high quality

ISO 9001 Quality management
ISO 14001 Environmental management system
ISO 13485 Medical devices

We use **high quality components and apply semiautomatic production** and rigorous testing to verify and validate each motion control solution before they leave our premises. Plus, our management systems, which are continuously audited, ensure optimized agile manufacturing. All these measures translate into high quality products.

Every single **RA-MINI ALU** undergoes strict QC assessments during production in order to guarantee optimal performance and durability.

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