

RA-MINI PLAST

In-line actuator series



Position control



High lifting force



Overcurrent protection



Limit switches



Elegant design



Compact size



Quiet operation



Maintenance free



The most economical and powerful polyamide solution

The RA-MINI PLAST is the perfect combination of **power**, **ultra-compact design** and **high performance** for applications where a tilt, lift, retract or push force of up to 70 N (16 lbf) is required.

The true heart of this high-tech device is its powerful transmission system that provides high power and performance, ensuring reliable and precise movement.

Main features



Powerful

Loads up to 70 N
(16 lbf)



Fast

Up to 14,7 mm/s
(0,6 in/s)



Safe

Overcurrent protection



Resistant

IP54 rating
Polyamide housing
Stainless steel rod

General specifications

Stroke	30 50 100 mm	1,18 1,97 3,9 in
Max. load	70 N at 3,5 mm/s	16 lbf at 0,14 in/s
Max. speed (no load)	14,7 mm/s	0,6 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	59 mm + stroke	2,3 in + stroke
Weight (50 mm / 1,97 in stroke)	40 g	1,4 oz
Housing material	Polyamide	
Rod material	Polished stainless steel	
Color	Black	
Mounting holes diameter	4,1 mm	0,16 in
Cable length	350 mm	14 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 18 in
Lead	5 mm	0,2 in
Max. side load (30 mm / 0,5 in stroke extended)	10 N	2,3 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

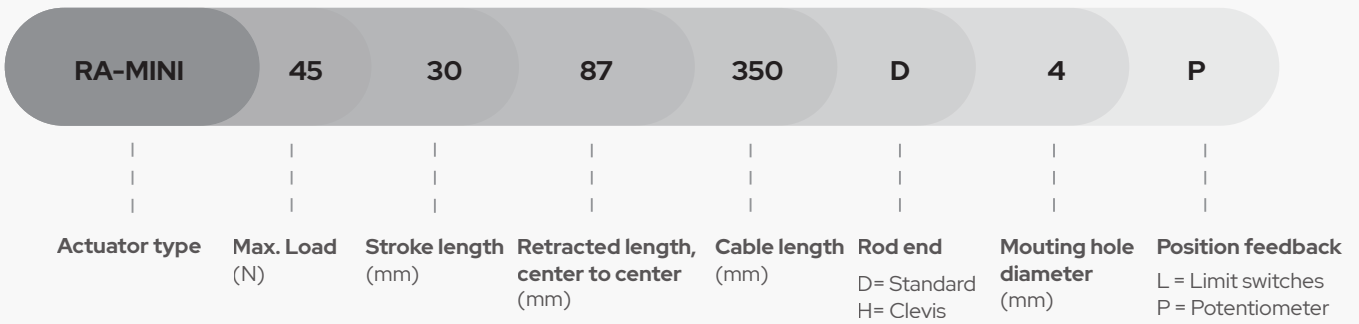
Max. stroke voltage 5 V

Min. stroke voltage 0 V

Preset configurations

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

RA-MINI PLAST 20.10.69.350.D4	RA-MINI PLAST 20.50.109.350.D4	RA-MINI PLAST 20.30.89.350.D4P
RA-MINI PLAST 45.10.69.350.D4	RA-MINI PLAST 45.50.109.350.D4	RA-MINI PLAST 45.30.89.350.D4P
RA-MINI PLAST 70.10.69.350.D4	RA-MINI PLAST 70.50.109.350.D4	RA-MINI PLAST 70.30.89.350.D4P
RA-MINI PLAST 20.30.89.350.D4	RA-MINI PLAST 20.10.69.350.D4P	RA-MINI PLAST 20.50.109.350.D4P
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RA-MINI PLAST 70.30.89.350.D4	RA-MINI PLAST 70.10.69.350.D4P	RA-MINI PLAST 70.50.109.350.D4P



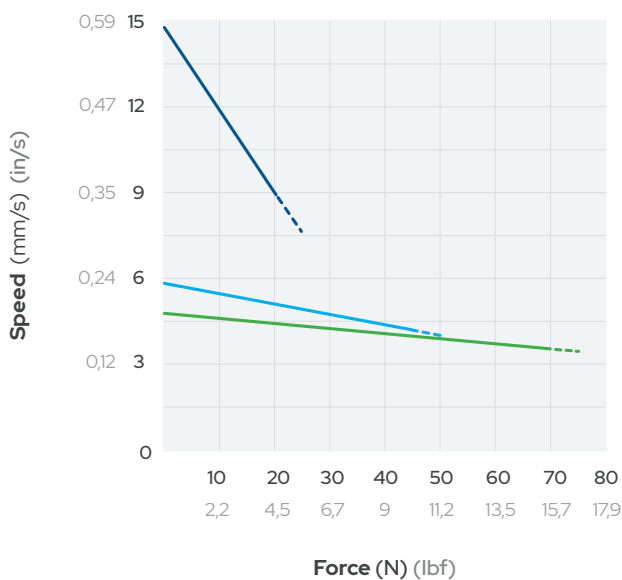
Force, speed and current

	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

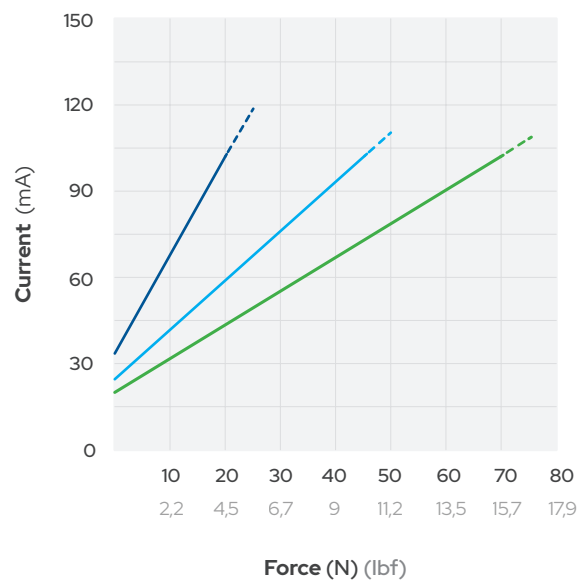
	Force (N) (lbf)	0 N 0 lbf	10 N 2,2 lbf	20 N 4,5 lbf	30 N 6,7 lbf	40 N 9 lbf	45 N 10,1 lbf
RA-MINI Standard reducer	Average current (mA)	25	40	60	75	93	104
	Speed (mm/s) (in/s)	5,9 - 0,23	5,5 - 0,22	5,0 - 0,20	4,8 - 0,19	4,5 - 0,17	4,1 - 0,16

	Force (N) (lbf)	0 N 0 N	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)	4,6 - 0,18	4,5 - 0,17	4,2 - 0,16	4,0 - 0,15	3,6 - 0,14

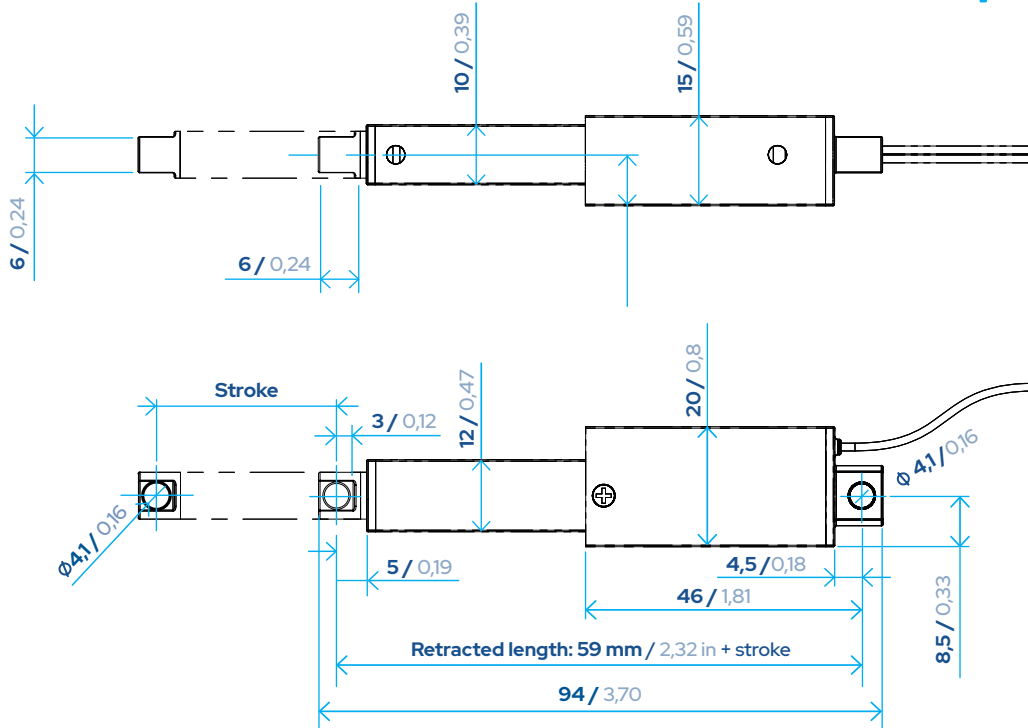
Speed - Force



Current - Force

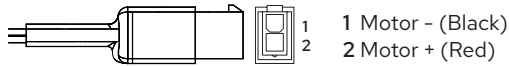


Dimensions (mm) (in)



Connectors

Limit switches option

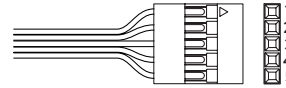


- 1 Motor - (Black)
- 2 Motor + (Red)

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 PLAST** undergoes strict QC assessments during production in order to guarantee optimal performance and durability.

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