

RA-MINI DF

In-line actuator series



High lifting force



Digital encoder



Compact



Elegant design



High speed



Easy installation



Maintenance free



Quiet operation



Compact with digital position control

The RA-MINI DF is the ideal choice for ultra-compact applications requiring a precise linear motion system with digital position control. Powered at 24 VDC, the RA-MINI DF can reliably and accurately move loads up to 70 N (16 lbf).

The high-efficiency motor and transmission enable the microactuator to only consume 44 mA at full load and produce a minimum noise level.

Main features



Powerful

Loads of up to 70 N
(16 lbf)



Precise

Linear motion system
with digital control



Safe

Overcurrent protection



Resistant

Polyamide housing
Low energy consumption
Stainless steel rod

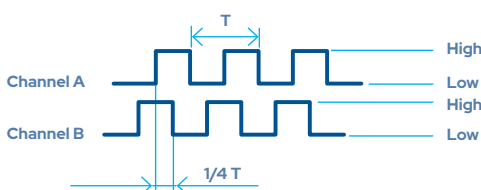
General specifications

Stroke	30 mm	1,2 in
Max. load	70 N at 2,4 mm/s	16 lbf at 0,09 in/s
Max. speed (No load)	2,9 mm/s	0,11 in/s
Power supply	24 VDC	
Max. current	44 mA	
Starting current	380 mA at 70 N	380 mA at 16 lbf
Retracted length (Center to center)	85 mm + stroke	3,3 in + stroke
Connector	06FMS-1.0SP-TF	
IP rating	IP5X	
Overcurrent protection	116 mA	
Housing material	Polyamide	
Rod material	Polished stainless steel	
Color	Black	
Operating temperature	-10 °C to 50 °C	14 °F to 122 °F
Storage temperature	-30 °C to 70 °C	-22 °F to 158 °F
Duty cycle	30%	
Backlash	0,1 mm	0,004 in
Weight	70 g	2,5 oz
Max. side load (With 30 mm / 1,2 in stroke, extended)	10 N	2,2 lbf

Digital encoder specifications

Type	Digital encoder	
Power supply	3,5 - 24 VDC	
Resolution	> 0,01 mm	> 0,004 in
Pulses per revolution (PPR)	6	
Pulses per stroke (PPS)	12.960	

Output signal



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.

Customizable upon request

Stroke length
Dimensions
Anodized colors
Connectors
Cable length
Brackets

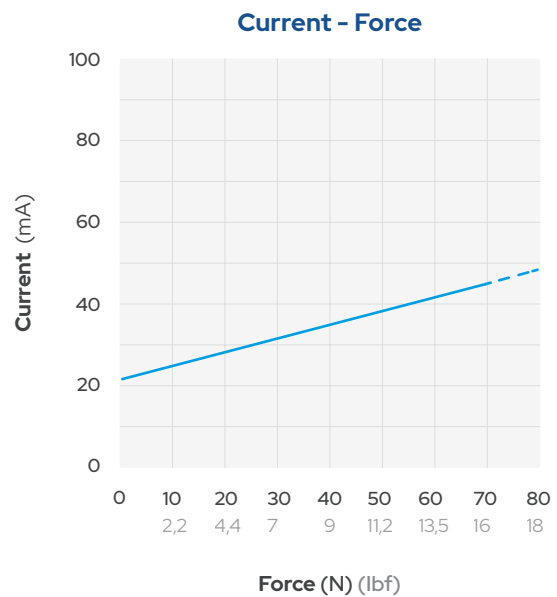
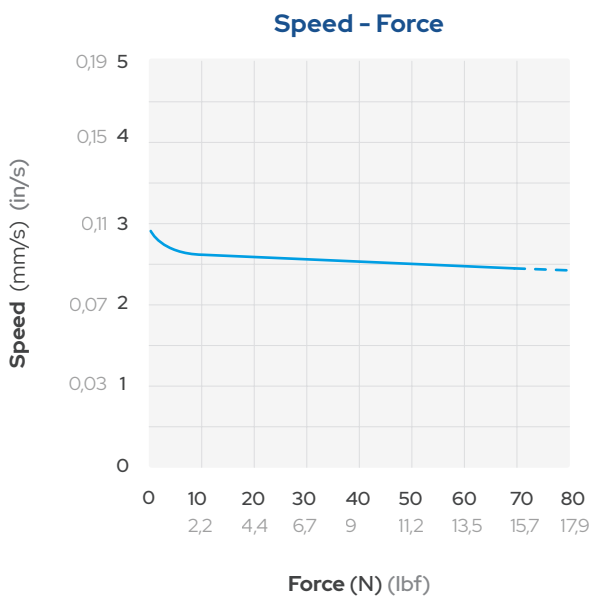
Please, contact info@regner.es for customized configurations.

RA-MINI DF 70 30 115 1 D 4 E

Actuator type	Max. Load (N)	Stroke length (mm)	Minimum length (mm)	Connector 1= Connector 06FMS -1.0SP-TF	Rod end type D= Standard H= Clevis	Mounting hole diameter (mm)	Position control E= Digital position control Ø = None

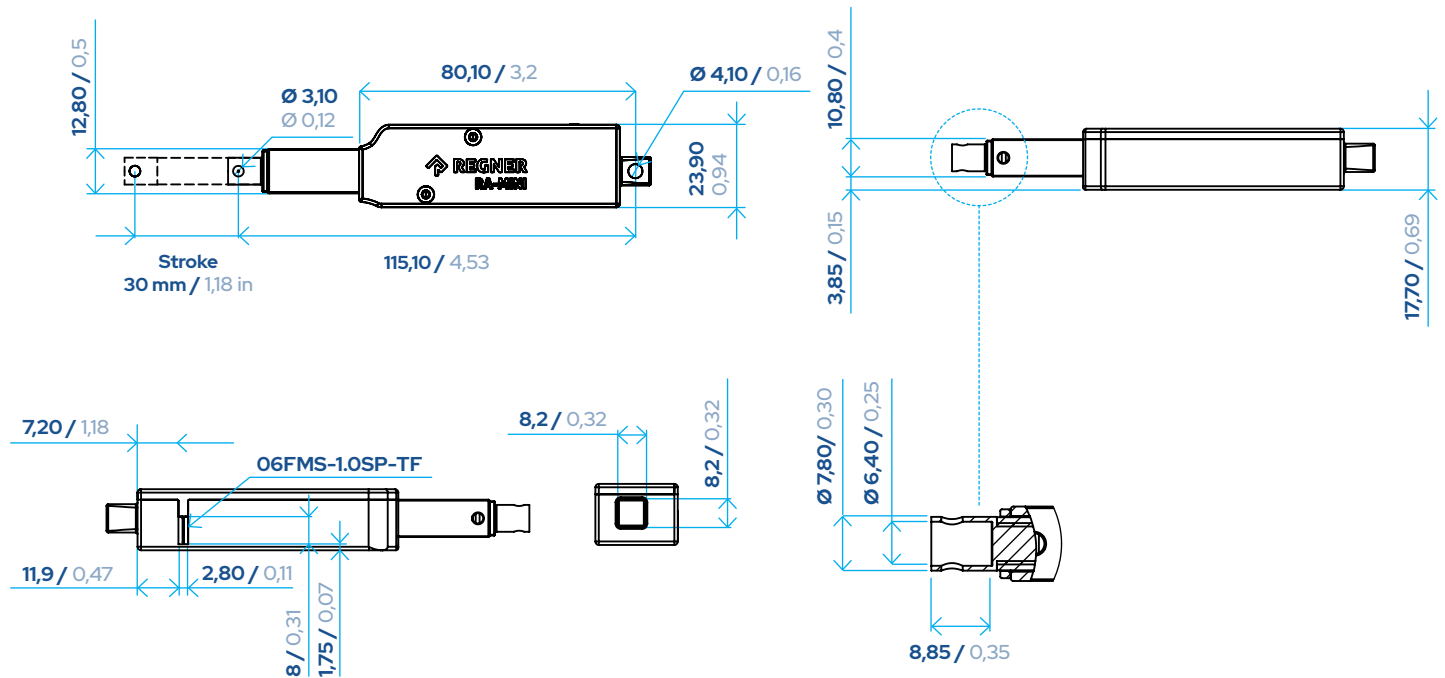
Force, speed and current

Force (N) (lbf)	0 N 0 N	10 N 2 lbf	20 N 4,5 lbf	30 N 7 lbf	40 N 9 lbf	50 N 11 lbf	60 N 13 lbf	70 N 16 lbf
Average current (mA)	21	25	28	31	34	38	41	44
Speed (mm/s) (in/s)	2,9 - 0,11	2,6 - 0,10	2,6 - 0,10	2,5 - 0,098	2,5 - 0,098	2,5 - 0,098	2,5 - 0,098	2,4 - 0,094



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

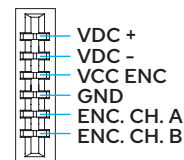
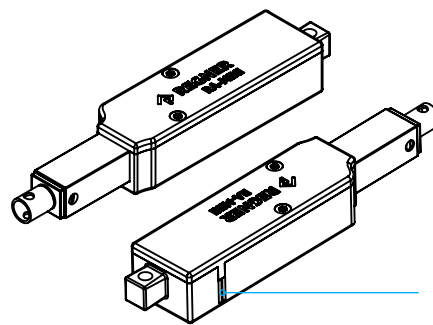
Dimensions (mm) (in)



Connector

06FMS-1.0SP-TF

Connector for flat cable
(Pitch: 1 mm / 0,04 in)



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

Ripollès, 4. Pol. Industrial Casa Nova.
17181 Aiguaviva (Girona). Spain

T.+34 972 476 911 - F. +34 972 475 803
info@regner.es - regner.tech

