

# Rodless Actuator LM80-H

12 and 24 Vdc - load up to 450 lbf

» Ordering Key - see page 72  
 » Glossary - see page 74  
 » Electric Wiring Diagram - see page 49



## Standard Features and Benefits

- Rodless actuator for horizontal operation
- For use in domestic, office or medical applications
- Rigid self supporting extruded aluminum profile
- Durable and corrosion free
- Lightweight and quiet operation
- Safety nut on ball screw versions
- Easy and fast T-slot mounting
- Maintenance free

## General Specifications

Parameter	LM80-H
Screw type	acme or ball
Internally restrained	yes
Manual override	no
Dynamic braking	no
Holding brake	no
End of stroke protection	spring loaded soft stop
Mid stroke protection	no
Motor protection	auto reset thermal switch
Motor connection with motor enclosure no motor enclosure	cable no cable, clips on motor
Motor connector with motor enclosure no motor enclosure	DIN 41524 8 pin plug clips on motor
Certificates	CE
Options	<ul style="list-style-type: none"> <li>• no motor enclosure</li> <li>• manual override</li> <li>• alternative motor positions</li> <li>• stroke over 1500 mm*</li> <li>• encoder *</li> </ul>

\* Contact customer support

## Performance Specifications

Parameter	LM80-H
Maximum load (Fb) [lbf]	450
Maximum load torque (Mb) [lbf-in]	DT••-T68M ••••• H 2200 DT••-B61M ••••• H 3540 DT••-B62M ••••• H 1600 DT••-B65M ••••• H 6640
Speed, at no load / at maximum load [in/sec]	DT••-T68M ••••• H 1.73 / 1.45 DT••-B61M ••••• H 2.16 / 1.96 DT12 -B62M ••••• H 4.33 / 2.87 DT24 -B62M ••••• H 4.33 / 3.42 DT••-B65M ••••• H 1.10 / 1.10
Available input voltages [Vdc]	12, 24
Standard stroke lengths [mm]	500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500
Operating temperature limits [°F]	+32 – +104
Full load duty cycle @ 68 °F [%]	15
Maximum on time [sec]	120
End play, maximum [in]	0.04
Restraining torque [lbf-in]	0
Lead cross section [mm <sup>2</sup> ] with / without motor enclosure	1.5 / –
Cable length [in] with / without motor enclosure	79 / –
Protection class with / without motor enclosure	IP44 / IP33

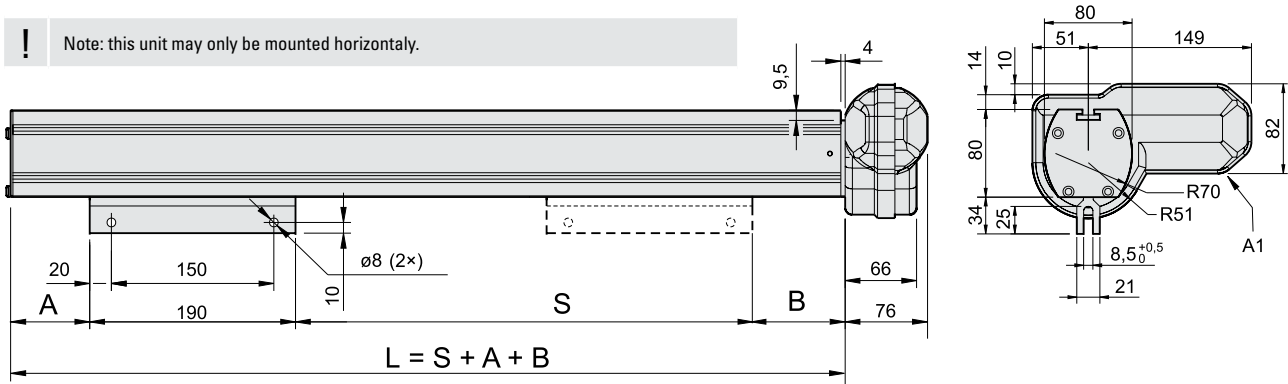
## Compatible Controls

Control model	See page
DPDT switch	52
DPDT switch box	53
DCG-170	60

# Rodless Actuator LM80-H

12 and 24 Vdc - load up to 450 lbf

**!** Note: this unit may only be mounted horizontally.



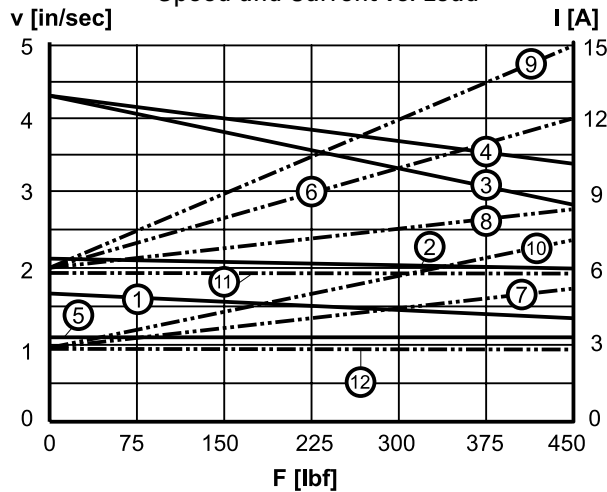
S: stroke  
L: length of profile  
A1: motor shown in position A (standard position)

**!** Note: drawing is in mm and according to European standards.

Stroke (S)	[mm]	500	600	700	800	900	1000	1100	1200	1300	1400	1500
<b>Dimensions (A) / (B)</b>	[mm]											
DT••-T68M ••••• H		54.0 / 77.0										
DT••-B61M ••••• H		102.0 / 77.0										
DT••-B62M ••••• H		102.0 / 77.0										
DT••-B65M ••••• H		79.0 / 77.0										
<b>Weight</b>	[lb]											
DT••-T68M ••••• H		24.8	28.8	32.7	36.7	40.6	44.5	48.5	52.4	56.3	60.3	64.2
DT••-B61M ••••• H		26.7	30.7	34.6	38.5	42.5	46.4	50.4	54.3	58.2	62.2	66.1
DT••-B62M ••••• H		26.7	30.7	34.6	38.5	42.5	46.4	50.4	54.3	58.2	62.2	66.1
DT••-B65M ••••• H		25.8	29.8	33.7	37.6	41.6	45.5	49.4	53.4	57.3	61.3	65.2

## Performance Diagrams

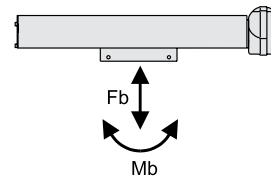
Speed and Current vs. Load



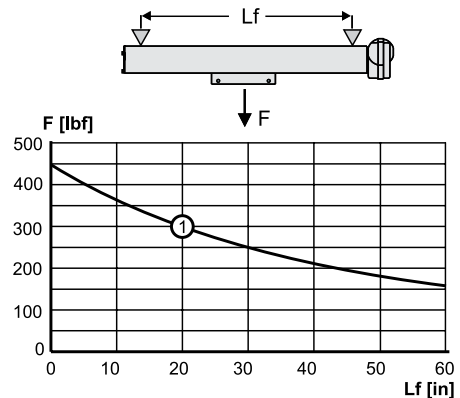
V: speed I: current F: load

- 1: speed DT••-T68M ••••• H
- 2: speed DT••-B61M ••••• H
- 3: speed DT12-B62M ••••• H
- 4: speed DT24-B62M ••••• H
- 5: speed DT••-B65M ••••• H
- 6: current DT12-T68M ••••• H
- 7: current DT24-T68M ••••• H and DT24-B61M ••••• H
- 8: current DT12-B61M ••••• H
- 9: current DT12-B62M ••••• H
- 10: current DT24-B62M ••••• H
- 11: current DT12-B65M ••••• H
- 12: current DT24-B65M ••••• H

## Definition of Forces



## Deflection of Profile



F: load Lf: distance between mounting points

1: maximum allowed deflection