MecVel®

HP5

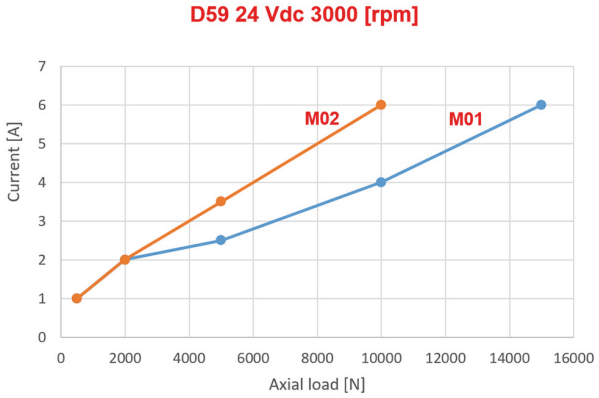
ELECTRIC LINEAR ACTUATOR

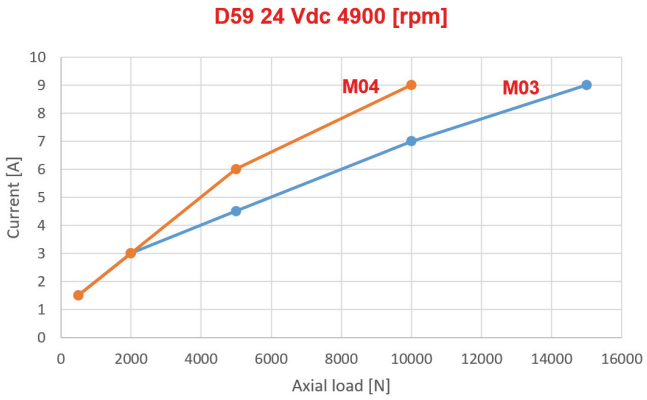
UP TO 15000 N OF FORCE AT THE SERVICE
OF YOUR LINEAR MOTION

PERFORMANCES

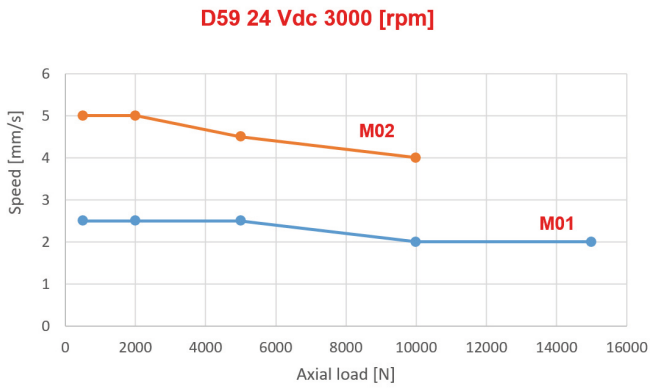
DC MOTOR D59 24V 3000 RPM						
Max. axial force [N]	Speed [mm/s]	Version	Consumption [A]	Screw type	Screw diameter [mm]	Screw pitch [mm]
15000	2	M01	6	ACME	25	5
10000	4	M02	6	ACME	25	10
DC MOTOR D59 24V 4900 RPM						
Max. axial force [N]	Speed [mm/s]	Version	Consumption [A]	Screw type	Screw diameter [mm]	Screw pitch [mm]
15000	3	M03	9	ACME	25	5
10000	5,5	M04	9	ACME	25	10

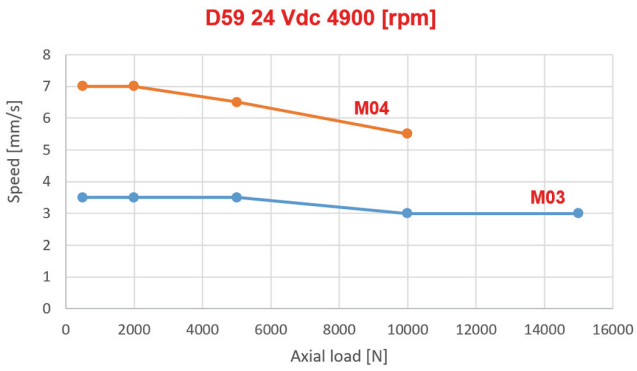
CURRENT DIAGRAMS





SPEED DIAGRAMS





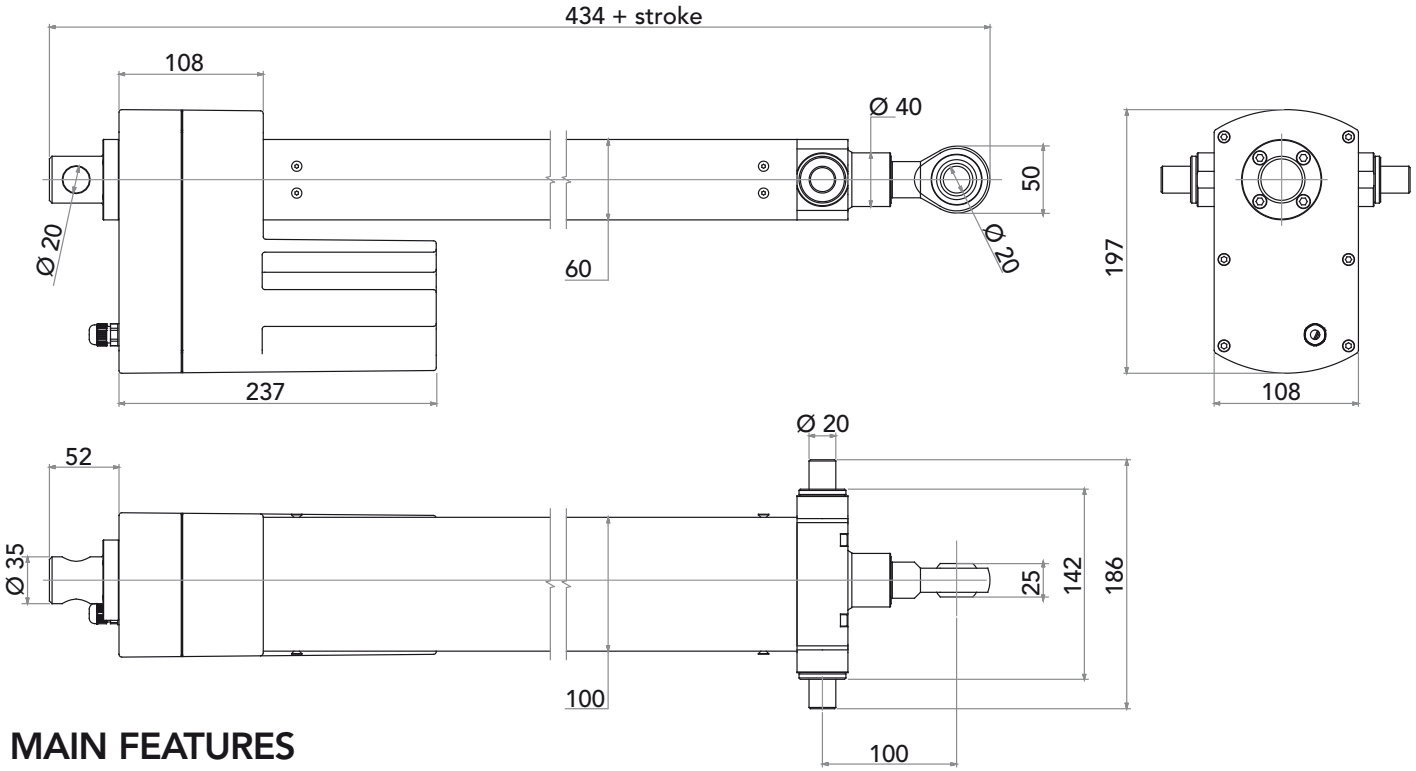
3000/4900 rpm are referred to the motor speed, with no-load.

Mechanical resistance features:

- Max static axial force: 45000 N up to 450 mm stroke, both in push and pull
- For longer strokes max static axial force in push decreases to a minimum of 11500 N with 1000 mm stroke

Never allow the linear actuator to reach the mechanical stop in order to avoid damages of internal components.

DIMENSIONS



MAIN FEATURES

- Permanent magnet motor
- Steel cross gearbox (ratio 1:112)
- Steel ACME lead screw
- Stainless steel or chrome plated steel push rod
- Aluminum housing and cover tube
- Grease lubrication
- IP65 protection degree
- Working temperature range -10/+60° C
- Intermittent duty

Since 1987 MecVel designs and manufactures electric linear actuators, tailored by a customization service developed with the aim to offer reliable solutions for the industrial automation field.
The high performances supplied by HP5 are ensured by the use of top quality components and a great attention for dimensions and fixing systems, making it versatile and easy to install in any system:

- The motor parallel to the body of the linear actuator allows to reduce product dimensions, transferring directly the motion to the input shaft in order to avoid losses in terms of efficiency
- The linear actuator is self-locking in static conditions and the electric system used do not have valves, pipes and compressors as in hydraulic systems, excluding the risk of oil leaks and making the product suitable to work in sterile environments (as medical and food industry)
- The installation is fast and clean, maintenance operations are minimal also in case of outdoor applications, thanks to the resistance against atmospheric agents as wind, salinity, dust, rain or high temperatures

Due to the importance that renewable energies have for the company, HP5 performances have been specifically developed to meet photovoltaic industry needs, with a product able to keep a very high static load also in case of long strokes (> 500 mm), maintaining extremely low both speed and consumption (15000 N with 2 mm/s and 6 A).
HP5 states itself as a new configuration characterized by structural strength and flexibility, to model itself in compliance with applications requiring high load capacity and moderate speed, to get precise movements controlled by a limit switches system and a constant feedback on the position reached.

ORDERING KEY

HP5 / 0800 / M01 / CC-24-59-3000 / FECC / E01 / P1 / A1 / A / L /

MODEL:
HP5

STROKE (mm):
800 mm = 0800

VERSION:
M01/M02/M03/M04
M00 in case of not standard speed

MOTOR:
Indicate version, voltage, size and speed

BRAKE:
FECC AS-24 Vdc: brake with separated power supply
Without brake: leave blank

ENCODER:
E01: encoder 2 channels 1 ppr NPN
Without encoder: leave blank

REAR END:
P0: without end (available only with OP option)
P1: eyelet
P2: 90° eyelet
P3: special rear end (technical drawing needed)

FRONT END:
A0: without end
A1: eyelet
A3: yoke + clip
A4: ball joint
A7: male M20x1,5
A9: special front end (technical drawing needed)

OPTIONS:
A: stainless steel version (push rod and front end)
FCD: diode-wired mechanical limit switches
FCM: magnetic limit switches
FX: anti-corrosion protective painting
L: anti-rotation device
OP: swiveling version

VARIANTS:
Drawing number

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