

High-Resolution Linear Actuator with Stepper Motor

Compact and Particularly Inexpensive

M-228 • M-229



- Travel ranges 10 and 25 mm
- High load capacity 80 N
- Resolution 0.36 nm with gearhead version
- Velocity to 4 mm/s
- Direct drive versions include handwheel
- Noncontact limit and reference switches

Compact standard-class linear drive

Stepper mike with 2-phase stepper motor as powerful direct drive, or slim design version with gearhead motors.

High-quality components

Nonrotating tip for uniform motion prevents wobble, torque, and wear at the point of contact. Noncontact limit switches protect the mechanics. A direction-sensing reference switch supports automation applications. Integrated position indicator. Versions with direct drive include handwheel for manual adjustment.

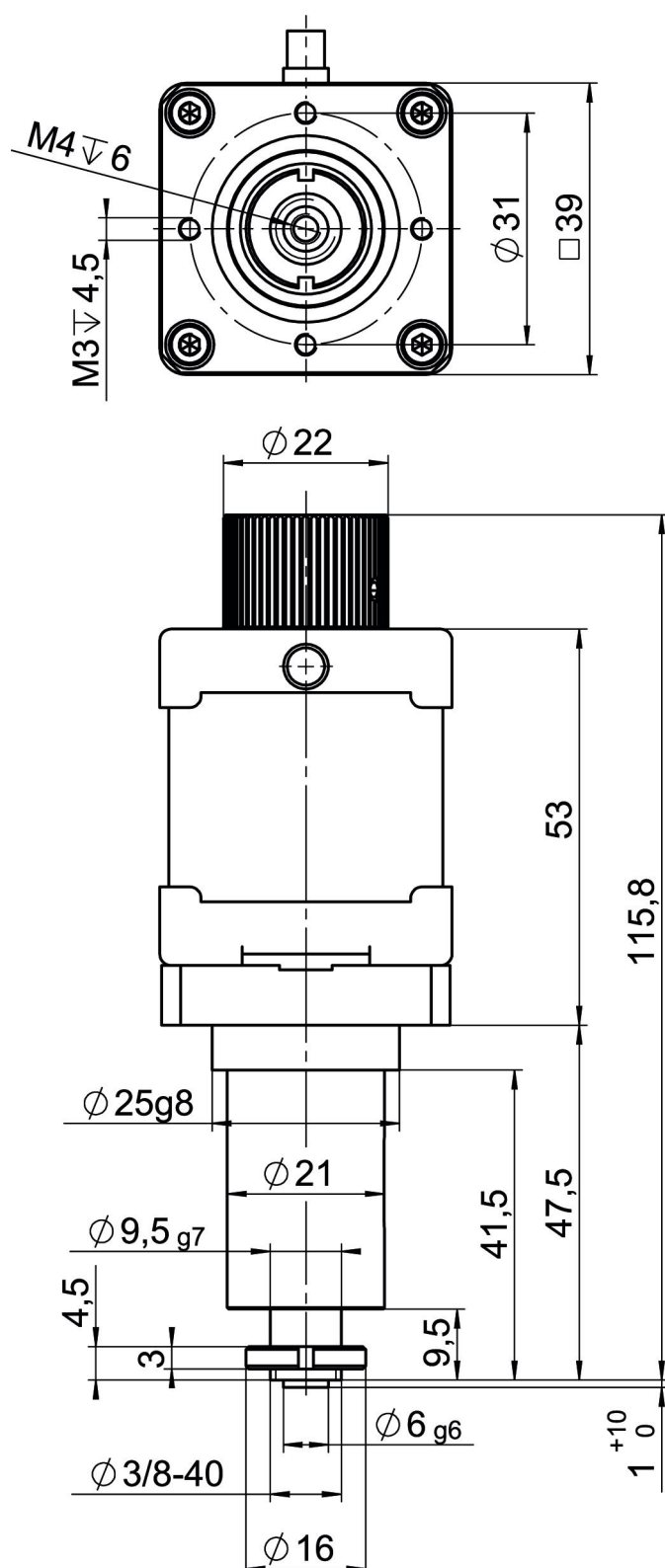
Inexpensive system solution

In conjunction with the networkable C-663.12 Mercury Step single-channel controller, the linear actuators offer good performance at an economically attractive system price for single-axis and multi-axis configurations.

Motion	Unit		M-228.10S	M-228.11S	M-229.25S	M-229.26S
Active axes			X	X	X	X
Travel range in X	mm		10	10	25	25
Maximum velocity in X, unloaded	mm/s		1.5	4	1.5	4

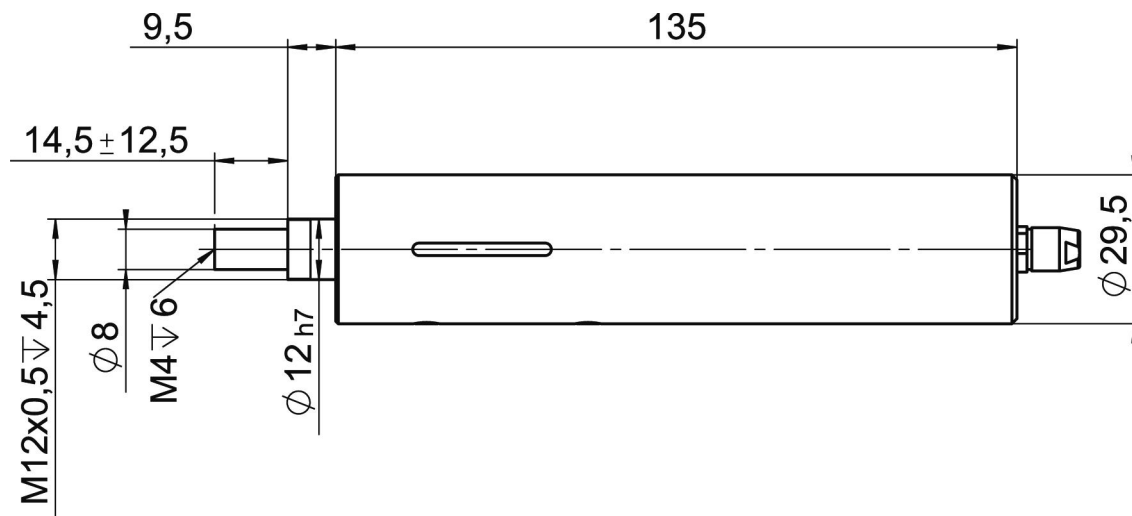
Positioning	Unit	Tolerance	M-228.10S	M-228.11S	M-229.25S	M-229.26S
Minimum incremental motion in X	μm	Typ.	1	1	1	1
Unidirectional repeatability in X	μm	Typ.	±2	±2	±2	±2
Backlash in X	μm	Typ.	5	10	10	10
Reference switch			Hall effect	Hall effect	Hall effect	Hall effect
Reference switch repeatability	μm		1	1	1	1
Limit switches			Hall effect	Hall effect	Hall effect	Hall effect

Drawings / Images

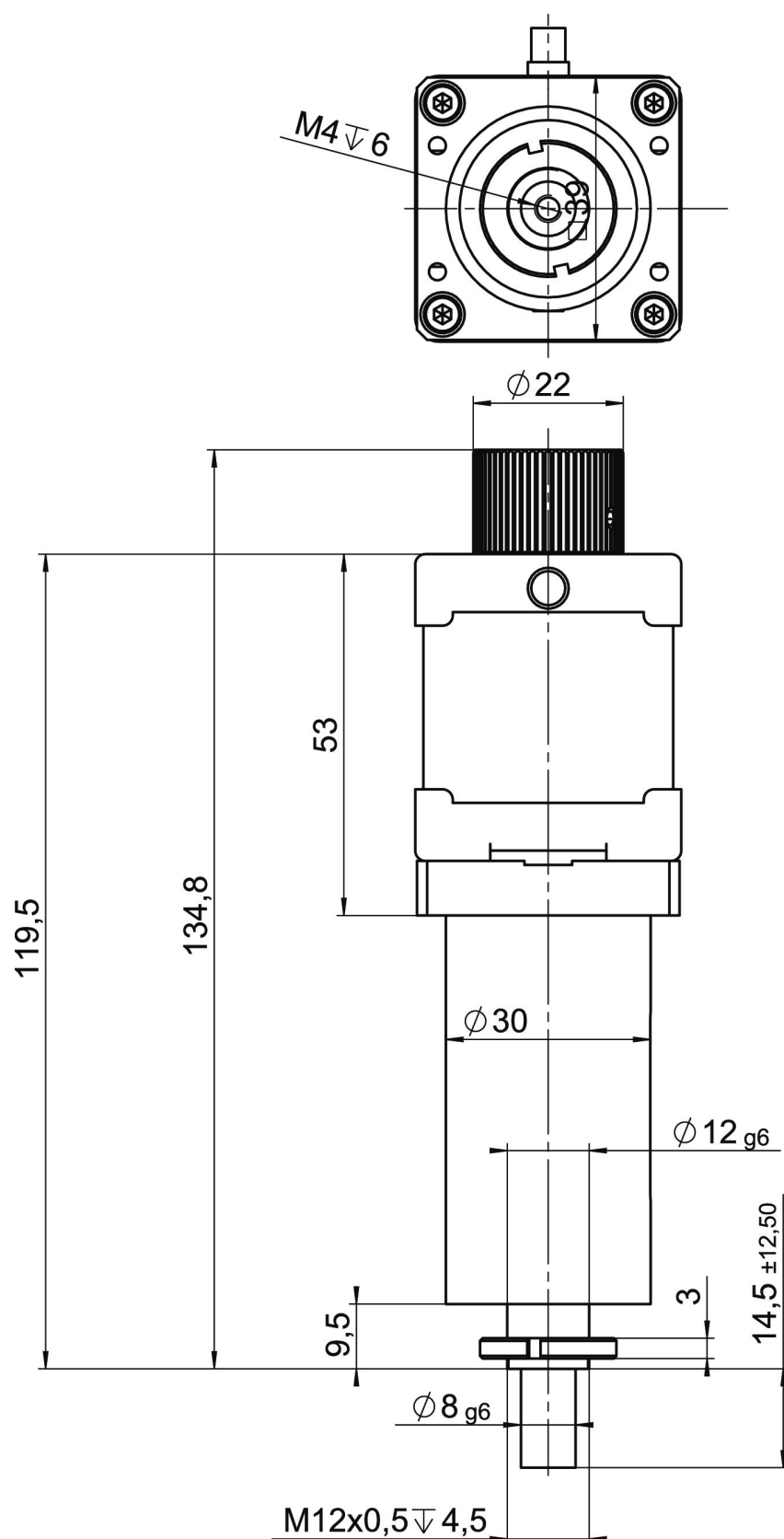


M-228.11S, dimensions in mm. Note that a comma is used in the drawings instead of a decimal point.

Drawings / Images



M-229.25S, dimensions in mm. Note that a comma is used in the drawings instead of a decimal point.



M-229.26S, dimensions in mm. Note that a comma is used in the drawings instead of a decimal point.

Order Information

M-228.10S

High-resolution linear actuator with stepper motor; 2-phase stepper motor with gearhead; 10 mm travel range; 20 N feed force; 1.5 mm/s maximum velocity; trapezoidal-threaded spindle; limit switches: Hall effect; 0.5 m cable length

M-228.11S

High-resolution linear actuator with stepper motor; 2-phase stepper motor; 10 mm travel range; 50 N feed force; 4 mm/s maximum velocity; trapezoidal-threaded spindle; limit switches: Hall effect; 0.6 m cable length

M-229.25S

High-resolution linear actuator with stepper motor; 2-phase stepper motor with gearhead; 25 mm travel range; 50 N feed force; 1.5 mm/s maximum velocity; trapezoidal-threaded spindle; limit switches: Hall effect; 0.5 m cable length

M-229.26S

High-resolution linear actuator with stepper motor; 2-phase stepper motor; 25 mm travel range; 80 N feed force; 4 mm/s maximum velocity; trapezoidal-threaded spindle; limit switches: Hall effect; 0.6 m cable length