

MOOG FLEXIBLE ELECTRIC SERVO ACTUATOR - SHORT STROKE SERIES

Offering a modular and robust concept for high performance industrial applications



For more than 20 years, Moog has provided electric actuation solutions for both injection molding and blow molding machines. Our high performance solutions are recognized by machine builders for offering high productivity, increased energy efficiency and reliability for a long lifetime. Moog latest actuator series for short strokes has been developed to serve the most demanding functions of blow molding machines.

The robust and flexible actuator is used for other industrial applications where precise and robust solutions are needed, e.g. for punch presses.

Three sizes are offered to provide a force range from 10 kN up to 100 kN, and the modular transmission geometry supports up to 140 mm (5.5 in) stroke. Three stroke designs (standard, long and high load) are available to meet unique machine requirements. This servo actuator has a flexible gearbox integration design to adapt to a wide range of speed requirements.

Optional built-in force sensors enable highly dynamic closed-loop force control. In addition a liquid cooling circuit is available to allow high duty cycles for high productivity. The end result is a flexible, modular and robust actuation solution for next generation blow molding machines.

FEATURES AND BENEFITS

- Compact design scaled to 3 sizes for easier integration into machine designs
- Modular approach is flexible for different stroke and force needs
- The design eliminates backlash to allow precise positioning
- Robust construction and life time lubrication for maintenance-free operation
- Low friction technology concept enables reliable force control

APPLICATIONS

- Blow molding machines
- Punch presses
- General industrial applications where high performance is required



3 SIZES, 3 VARIANTS OF STROKE DESIGN

	Size 90	Size 160	Size 280
Standard design			
Maximum force [kN]	10.0	30.0	100
Stroke range [mm (in)]	5.0 to 40.0 (0.20 to 1.6)	5.0 to 70.0 (0.20 to 2.8)	5.0 to 120 (0.20 to 4.7)
Speed range ¹ [mm/s (ft/s)]	1.0 to 1,500 (0.30 to 457)	1.0 to 1,500 (0.30 to 457)	1.0 to 1,500 (0.30 to 457)
Force sensor range ² [kN]	15.0	50.0	150
Dimensions L x W x H ³ [mm (in)]	94.0 x 90.0 x 130 (3.7 x 3.5 x 5.1)	164 x 160 x 240 (6.5 x 6.3 x 9.5)	256 x 290 x 341 (10.1 x 11.0 x 13.4)
Long stroke design			
Maximum force [kN]	10.0	30.0	-
Stroke range [mm (in)]	40.0 to 80.0 (1.6 to 3.1)	70.0 to 140 (2.8 to 5.5)	-
Speed range ¹ [mm/s]	5.0 to 3,000 (1.5 to 914)	5.0 to 3,000 (1.5 to 914)	-
Force sensor range ² [kN]	15.0	50.0	-
Dimensions L x W x H ³ [mm (in)]	94.0 x 112 x 170 (3.7 x 4.4 x 6.7)	164 x 194 x 310 (6.5 x 7.6 x 12.2)	-
High load design			
Maximum force [kN]	30.0	100	-
Stroke range [mm (in)]	5.0 to 20.0 (0.20 to 0.79)	5.0 to 34.0 (0.20 to 1.3)	-
Speed range ¹ [mm/s]	1.0 to 500 (0.30 to 152)	1.0 to 500 (0.30 to 152)	-
Force sensor range ² [kN]	50.0	150	-
Dimensions L x W x H ³ [mm (in)]	94.0 x 90.0 x 150 (3.7 x 3.5 x 5.9)	164 x 160 x 245 (6.5 x 6.3 x 9.7)	-

- 1) Dependent on gearbox ratio selection
- 2) Built-in force sensor optional
- 3) Without gearbox and motor (x = input shaft, z = output shaft)

Trunnion mount

Flange may be rotated by 90 degree



Flange mount

Front flange or rear flange



Moog has offices around the world. For more information or the office nearest you, contact us online.

E-mail: info@moog.com

www.moog.com/industrial

Moog is a registered trademark of Moog Inc. and its subsidiaries. All trademarks as indicated herein are the property of Moog Inc. and its subsidiaries.
©2010 Moog Inc. All rights reserved. All changes are reserved.

Short Stroke Series
Rev. 1, October 2010, Id. CDL30163

This technical data is based on current available information and is subject to change at any time. Specifications for specific systems or applications may vary.

MOOG