

# HYDROSTATIC TEST ACTUATOR

## Hydrostatic Bearing



Moog has extensive experience in developing actuators for some of the world's most demanding applications. Building high-performance motion control components is one of our strengths. Actuators are crucial for high-performance test solutions, and our customers have expressed a need for more reliable, high-performance components than those currently available in the marketplace. We have assigned our top engineers to this product development project, combining test application knowledge with a long history of actuation experience.

The Moog Hydrostatic Bearing Actuator C086-6 series, offers higher reliability, reduced maintenance, and increased dynamic performance for test labs seeking a competitive edge. High-quality materials combined with superior engineering, such as advanced cushion design and innovative manifold design, make these actuators the optimal choice for a range of system challenges.

The C086-6 series actuator is the benchmark for strength and durability test applications. Enhancing the performance of today's test systems while meeting stricter environmental concerns requires a new kind of building block component. The Moog actuator represents a new breed of component design and robust performance. This new building block can be used in many applications, including single and multiple actuator test systems.



### ADVANTAGES

- Available in various sizes to suit a range of application
- Enhanced flexibility to configure the actuators for specific applications
- Improved side load test capabilities, allowing for higher load, improved stability, and better damping
- Integrated manifold design reduces exterior piping, improving efficiency and lowering service costs
- Tungsten carbide coating on the piston rod enhances the service life of the actuator by reducing friction, thereby improving overall performance and efficiency

### APPLICATIONS

- Specific applications on Hydraulic Simulation Table and 4-Post Hydrostatic Test System
- Electrohydraulic Multi-Axis Test System, particularly for component testing in automotive, civil, and rail/train testing areas with high dynamic and/or high side-load capacity

# SPECIFICATIONS

## TECHNICAL DATA

Model Number	Rated Force	Static Force <sup>1)</sup>	Full Stroke	Working Stroke	Cushion Length <sup>2)</sup>	Rod Diameter	Bore Diameter	Effective Piston Area
Unit	kN	kN	mm	mm	mm	mm	mm	cm <sup>2</sup>
C086-62	50	59	140,190,290,340	100,150,250,300	20	80	100	28.3
C086-63	100	113	140,190,290,340	100,150,250,300	20	100	130	54.2
C086-64	160	172	140,190,290,340	100,150,250,300	20	100	143	82
C086-65	250	276	140,190,290,340	100,150,250,300	20	125	180	132

<sup>1)</sup> Static force calculated at 210 bar operation pressure

<sup>2)</sup> Cushion at both ends

## CONFIGURATION OPTIONS

### Servo Valve

- Available with G761 (1 to 3 pieces), 72, 79, D791 or D792; rated flow from 63 to 800 l/min.

### Joints and Bases

- A swivel can be selected for most common mounting configurations. The base end mounting can be fixed based or with a swivel at the end. An extension base is also an option as extended length if required.

### Built-in Co-axial LVDT Position Sensor

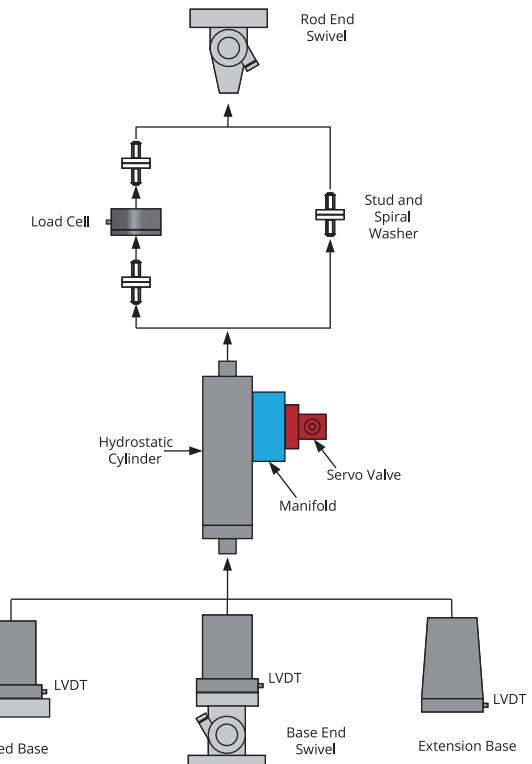
- Frictionless operation of the LVDT core moves without contact with the housing, ensuring long-term reliability and minimal wear and tear. The LVDT can be null adjusted easily using simple tools.

### Load Cell

- Fatigue-rated load cells are properly sized to provide reliable force feedback. Accessories such as studs and spiral washers are typically provided together with the load cell.

### Manifold Options

- Additional components enhance the functionality, such as flow limitation, differential pressure (Delta-P) sensor, bi-pressure relief valve, and accumulator.



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

info.china@moog.cn

[www.moog.com/industrial](http://www.moog.com/industrial)

Moog is registered trademark of Moog Inc. and its subsidiaries. All trademarks as indicated herein are the property of Moog Inc. and its subsidiaries. ©2025 Moog Inc. All rights reserved. All changes reserved.

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.

Hydrostatic Test Actuator  
MTC/Rev., Nov 2025, CDL 68529-en

**MOOG**