COMPACT DYNAMIC BRUSHLESS SERVO MOTORS

Low inertia and compact length for high performance applications

For over two decades, the name Moog has been associated with brushless servo drives and servo motors offering the highest dynamics, power density and reliability. These products are designed as a system to deliver superior servo performance. Moog offers a broad range of standard designs as well as solutions tailored to meet your unique application requirements. Moog Brushless Servo Motors and Drives are found on a variety of high performance applications.

Moog Compact Dynamic Brushless Servo Motors (CD Series) are electronically commutated synchronous AC motors with permanent magnet field excitation. CD Series Servo Motors are designed for highly dynamic servo applications where positioning times of 30 ms or less are often the norm. The series offers one of the industry's widest power ranges with standard models available at continuous torque ratings from 0.15 to 74.2 Nm (1.3 to 657 lbf in). Moog's application engineers are experts in helping to create the exact design for your unique needs.

All Moog Servo Motors are manufactured in-house and the use of tight machining tolerances, precision balancing and thorough production testing guarantee a long service life.

FEATURES AND BENEFITS

- Superior dynamics improves cycle time
- Compact and lightweight construction for flexible machine design
- Proprietary low-cogging design
- Rugged, minimum maintenance

APPLICATIONS

- Metal forming and presses
- Plastics
- Robotics

TECHNICAL DATA

Motor type [1)2)]	Stall torque		Maximum torque		Nominal speed [3)]	Inertia		Square flange
	Nm	lbf in	Nm	lbf in	r/min	kg cm^2	10^{-4} lbf in s^2	mm
G-1-M2	0.15	1.3	0.50	4.4	9,000	0.026	0.23	40
G-1-M4	0.26	2.3	1.0	8.9	6,000	0.046	0.41	40
G-1-M6	0.35	3.1	1.5	13.3	6,000	0.066	0.58	40
G-2-V2	0.24	2.1	0.83	7.3	9,000	0.090	0.8	55
G-2-V4	0.48	4.2	1.6	14.2	7,500	0.14	1.2	55
G-2-V6	0.98	8.7	3.2	28.3	7,500	0.24	2.1	55
G-2-V8	2.0	17.7	6.5	57.5	6,200	0.45	4	55
G-3-V2	0.60	5.3	1.7	15	11,700	0.16	1.4	70
G-3-V4	1.6	14.2	5.0	44.3	8,600	0.38	3.4	70
G-3-V6	2.5	22.1	8.3	73.5	5,000	0.61	5.4	70
G-3-V8	3.8	33.6	13.1	116	4,900	0.95	8.4	70
G-4-V2	1.5	13.3	3.3	29.2	7,800	1.0	8.9	100
G-4-V4	2.8	24.8	6.6	58.4	5,500	1.6	14.2	100
G-4-V6	4.8	42.5	13.2	117	4,200	2.7	23.9	100
G-4-V8	8.1	71.7	26.5	235	3,300	4.9	43.4	100
G-4-V9	10.9	96.5	39.8	352	3,000	7.0	62	100
G-5-V2	5.9	52.2	13.5	119	4,800	4.6	40.7	140
G-5-V4	11.1	98.2	27.0	239	4,000	8.1	71.7	140
G-5-V6	16.2	143	40.5	358	3,400	11.8	104	140
G-5-V8	25.4	225	67.5	597	2,800	18.9	167	140
G-5-V9	34.3	304	94.5	836	2,600	26.2	232	140
G-6-V2	13.9	123	40.0	354	3,850	27.8	246	190
G-6-V4	26.2	232	80.0	708	3,000	53.7	475	190
G-6-V6	38.8	343	120	1,062	2,900	79.5	704	190
G-6-V8	50.7	449	160	1,416	2,400	106	938	190
G-6-V9	74.2	657	240	2,124	2,400	157	1,389	190

1) Motor type code (e.g. G-1-M2):
G = CD Series Servo Motor
1 = Flange size
M = Winding voltage (M = Low voltage, 325 V_{DC} with NTC thermal sensor)
V = Winding voltage (V = High voltage, 565 V_{DC} with PTC thermal sensor)
2 = Stack length
Please see full catalog for details.

2) Low voltage versions of G-2 to G-6 available (e.g. G-4-M4).

3) Nominal speed can be easily adjusted by changing the stator windings. Please contact your local Moog application engineer for information.

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

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www.moog.com/industrial

CD Series Servo Motor
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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.

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