AML SERVO MOTORS

Dynamic fan-cooled motors (6 poles)

Moog's fan-cooled AML servo motors (6 poles) with separate ventilation are designed for highly dynamic servo applications that require a wide speed range and variable load. Motors with separate ventilation are most often used when higher power density is required and a liquid-cooled option is not suitable. The continuous torque and power output capabilities of the AML series are up to 1.5 times greater than those of its naturally cooled variant, the AM series, while their sizes are almost the same. The AML servo motor series offers one of the largest power ranges in the industry, with standard models delivering continuous stall torque values from 1.72 to 194 Nm [15.2–1,716 lb/in].

The modular design of the AML series supports a variety of custom options. In addition, Moog can provide fully customized solutions. For special applications, the standard design of the AML motor (which features separate ventilation) can be modified so that cooling fans are mounted directly onto the motor shaft. Other customized solutions include winding systems and special insulation options for different intermediate circuit voltages (12 V, 24 V, 48 V, 330 V, 560 V and 700 V DC) as well as for a wide range of different voltage constants (from about 1 to 500 V min. / 1,000). For high speed applications, Moog offers special rotors with double or triple bandages. We can also customize active lengths and develop special mechanical designs for the flange, shaft end and bearings, for applications requiring higher radial and axial forces. Our motors can be engineered to meet even the toughest environmental requirements (higher temperature; hazardous or harsh environment), have increased IP ratings and

be equipped with a variety of available encoder options to meet all our customer needs.

DIMENSIONS	Measuring Unit	AML Servo Motors
Continuous Stall Torque M°	Nm [lb-in]	1.72-194 [15.2-1,716]
Peak Torque M _{max}	Nm [lb-in]	5.3-430 [46.9-3,805]
Rated Speed n_N	min ⁻¹ (rpm)	0-10,000
Rated Power P_N	kW [hp]	0.43-29.9 [0.577-40.1]
Rated Torque M_{N}	Nm [lb-ft]	1.64-186 [14.5-1,645]
Moment of Inertia J	kg m² [lb-in sec²x 10 ⁻⁴]	0.72-430 [6.4-3,805]
Position Transducer	Standard / Optional	Resolver / Encoder
Temperature Monitoring	N/A	PTC, PT1000, Thermoswitch
Brake	N/A	Optional
Rated Bus Voltage V DC	V	300/560 (or customizable)
Certificate / Marks	N/A	CE
Cooling	N/A	Fan Cooling



FEATURES

- High torque and speed capability
- Compact design
- High efficiency
- High quality production
- High precision assembly
- Long life and high operational reliability

BENEFITS

- Highly customizable
- Low inertia
- High acceleration in transient conditions
- Rugged structure
- Minimal maintenance needs
- High power density
- Different winding options available



MOOG

WHAT MOVES YOUR WORLD

AML SERIES

TYPE	d	D	Е	F	L	L1	М	N	Р	Q	S	□T	□U	□V	W	Y
TIFE	mm															
AML404	14k6	80j6	30	40	237	269	10	3	7	100	115	92	107	129	12.5	DIN 332-DS M5
AML406	14k6	80j6	30	40	273	305	10	3	7	100	115	92	107	129	12.5	DIN 332-DS M5
AML408	14k6	80j6	30	40	305	332	10	3	7	100	115	92	107	129	12.5	DIN 332-DS M5
AML504	19k6	95j6	40	45	310	341	10	3	9	115	134	105	120	145	16	DIN 332-DS M6
AML506	19k6	95j6	40	45	355	386	10	3	9	115	134	105	120	145	16	DIN 332-DS M6
AML508	19k6	95j6	40	45	410	431	10	3	9	115	134	105	120	145	16	DIN 332-DS M6
AML713	24k6	130j6	50	70	318	367	19	3.5	11	165	186	135	155	188	19	DIN 332-DS M8
AML714	24k6	130j6	50	70	368	417	19	3.5	11	165	186	135	155	188	19	DIN 332-DS M8
AML716	24k6	130j6	50	70	418	467	19	3.5	11	165	186	135	155	188	19	DIN 332-DS M8
AML718	24k6	130j6	50	70	468	-	19	3.5	11	165	186	135	155	188	19	DIN 332-DS M8
AML904	32k6	180j6	58	72	469	519	22	3.5	14	215	242	190	213	234	28	DIN 332-DS M12
AML906	32k6	180j6	58	72	544	594	22	3.5	14	215	242	190	213	234	28	DIN 332-DS M12
AML1122	42k6	230j6	100	90	475	-	25	4	14.5	265	300	265	268	308	36	DIN 332-DS M16
AML1123	42k6	230j6	100	90	500	-	25	4	14.5	265	300	265	268	308	36	DIN 332-DS M16
AML1125	42k6	230j6	100	90	550	-	25	4	14.5	265	300	265	268	308	36	DIN 332-DS M16
AML1128	42k6	230j6	100	90	625	-	25	4	14.5	265	300	265	268	308	36	DIN 332-DS M16

L (without brake)

L1 (with brake)

W = thread depth







E-mail: info-vsm@moog.com

www.moog.com/industrial

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