AM SERVO MOTORS

Dynamic servo motors with low inertia and small flange sizes

Moog AM series (6 poles) servo motors with natural cooling are designed for highly dynamic servo applications requiring a wide speed range and variable load. From an electromagnetic standpoint, AM motors are designed for an overload capacity of 2-4 times the rated torque. Therefore, these servo motors can be used with substantially higher torques than those produced at nominal speed. They also offer one of the largest power ranges in the industry, achieving continuous stall torque values of 0.42 to 140 Nm [3.7–1,239 lb-in].

The modular design of the AM servo motor supports a variety of options. In addition, Moog can provide fully customized solutions. We offer 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, in 2- or 4-pole variants. We can also customize active lengths and develop special mechanical designs for the flange, bearings and shaft end, for applications requiring higher radial and axial forces. Our motors can be engineered to meet even the most demanding environmental requirements (high temperature; hazardous or harsh environments), have increased IP ratings and be equipped with a variety of available encoder options to meet all our customer needs.

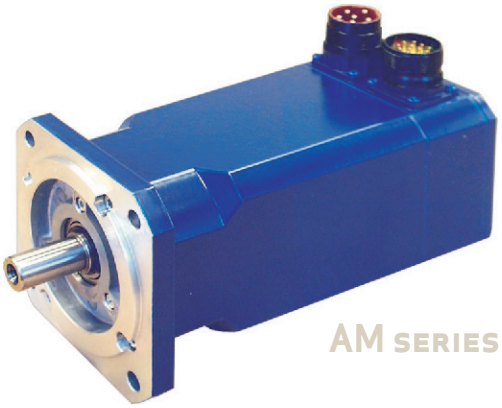
FEATURES

- Small dimensions
- High torque overload capability
- 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
- Different winding options available

Dimensions	Measuring Unit	AM Servo Motors
Continuous Stall Torque M°	Nm [lb-in]	0.42–140 [3.7–1,239]
Peak Torque M_{max}	Nm [lb-in]	1.72–430 [15.2–3,805]
Rated Speed n_N	min^{-1} (rpm)	0–10,000
Rated Power P_N	kW [hp]	0.2–17 [0.268–22.8]
Rated Torque M_N	Nm [lb-ft]	0.4–24 [3.54–1,097]
Moment of Inertia J	kg m^2 [lb-in sec^2 x 10^{-4}]	0.09–430 [0.8–3,805]
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	Natural

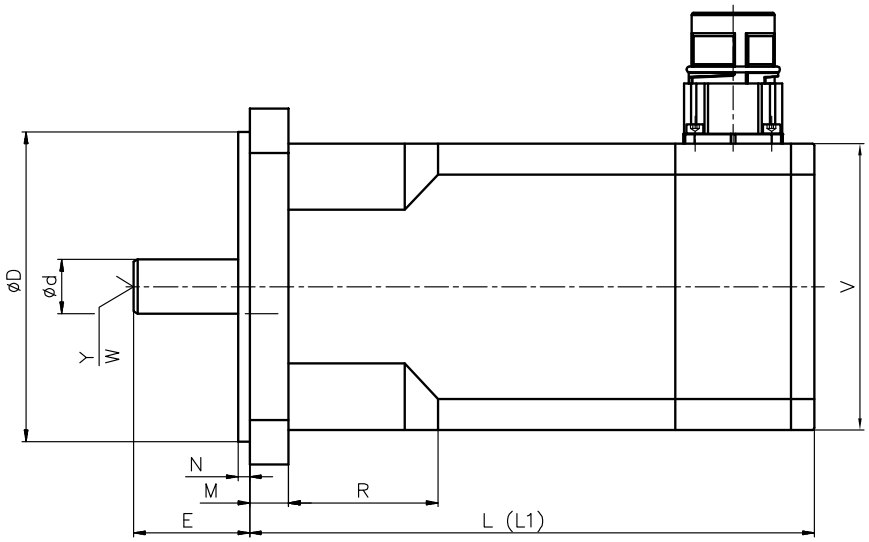


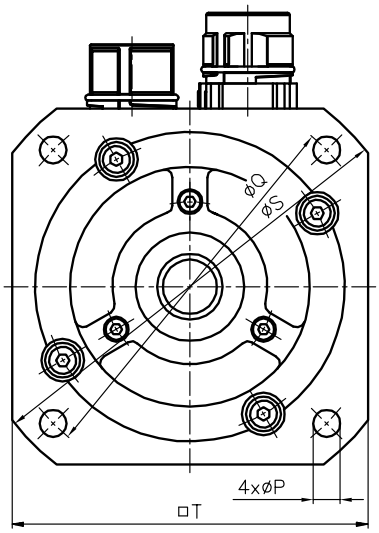
DIMENSIONAL DETAILS

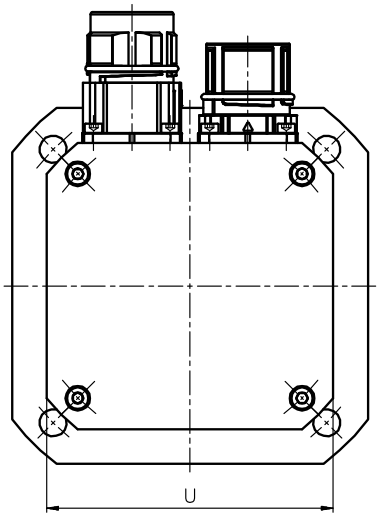
AM SERIES

TYPE	d	D	E	L	L1	M	N	P	Q	R	S	□T	U	V	W	Y
	mm															
AM254	9k6	40j6	24	137	170	8	2.5	5.8	63	45±5	74	55	53	50	–	ISO 6411-B 2/6,3
AM256	9k6	40j6	24	152	185	8	2.5	5.8	63	45±5	74	55	53	50	–	ISO 6411-B 2/6,3
AM258	9k6	40j6	24	182	215	8	2.5	5.8	63	45±5	74	55	53	50	–	ISO 6411-B 2/6,3
AM404	14k6	80j6	30	137	169	10	3	7	100	35±5	115	92	74	74	12.5	DIN 332-DS M5
AM406	14k6	80j6	30	173	205	10	3	7	100	35±5	115	92	74	74	12.5	DIN 332-DS M5
AM408	14k6	80j6	30	205	232	10	3	7	100	35±5	115	92	74	74	12.5	DIN 332-DS M5
AM504	19k6	95j6	40	200	231	10	3	9	115	74±5	134	105	97	97	16	DIN 332-DS M6
AM506	19k6	95j6	40	245	276	10	3	9	115	74±5	134	105	97	97	16	DIN 332-DS M6
AM508	19k6	95j6	40	290	321	10	3	9	115	74±5	134	105	97	97	16	DIN 332-DS M6
AM713	24k6	130j6	50	244	293	19	3.5	11	165	80±5	186	135	135	135	19	DIN 332-DS M8
AM714	24k6	130j6	50	294	343	19	3.5	11	165	80±5	186	135	135	135	19	DIN 332-DS M8
AM716	24k6	130j6	50	344	393	19	3.5	11	165	80±5	186	135	135	135	19	DIN 332-DS M8
AM718	24k6	130j6	50	394	443	19	3.5	11	165	80±5	186	135	135	135	19	DIN 332-DS M8
AM904	32k6	180j6	58	340	390	22	3.5	14	215	101±5	242	190	190	190	28	DIN 332-DS M12
AM906	32k6	180j6	58	415	465	22	3.5	14	215	101±5	242	190	190	190	28	DIN 332-DS M12
AM908	32k6	180j6	58	465	515	22	3.5	14	215	101±5	242	190	190	190	28	DIN 332-DS M12
AM1122	42k6	230j6	100	310	387	25	4	14.5	265	88±5	300	265	224	224	36	DIN 332-DS M16
AM1123	42k6	230j6	100	335	412	25	4	14.5	265	88±5	300	265	224	224	36	DIN 332-DS M16
AM1125	42k6	230j6	100	385	462	25	4	14.5	265	88±5	300	265	224	224	36	DIN 332-DS M16
AM1128	42k6	230j6	100	460	537	25	4	14.5	265	88±5	300	265	224	224	36	DIN 332-DS M16

L (without brake) L1 (with brake) The length of low voltage servo motors may vary.







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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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