AMW SERVO MOTORS

Liquid-cooled servo motors
for highly dynamic servo applications

The Moog AMW series (6 poles) liquid-cooled servo motors are designed for highly dynamic servo applications with a wide speed range and variable load. These servo motors offer one of the largest power ranges in the industry, with standard models delivering continuous stall torque values from 1 to 137 Nm [8.8-1,211.6 lb-in]. Compared to their naturally-cooled counterpart (the AM series), the torque and output power of the AMW models are almost doubled, despite their sizes being almost the same. Another advantage of these liquid-cooled motors is their ability to operate at higher ambient temperatures.

The AMW servo motors feature modular designs that support 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, 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.

FEATURES

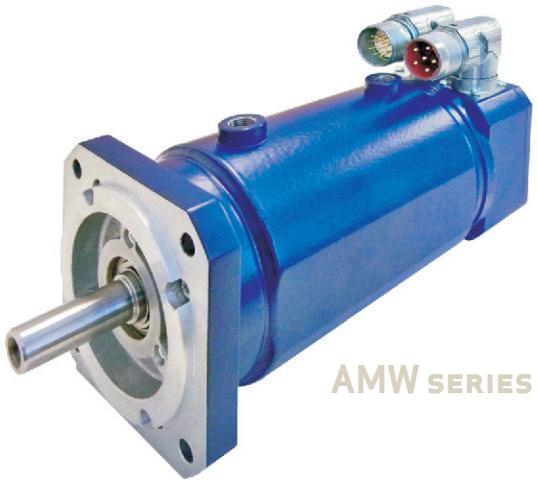
- High continuous torque
- Compact dimensions
- High efficiency
- High quality production
- High precision assembly
- Long life and high operational reliability

BENEFITS

- Highly customizable
- High power density
- Space-saving equipment dimensions
- Rugged structure
- Minimal maintenance needs
- Ability to operate at increased ambient temperatures
- Different winding options available

Dimensions	Measuring Unit	AMW Servo Motors
Continuous Stall Torque M°	Nm [lb-in]	1-137 [8.8-1,211.6]
Peak Torque M_{max}	Nm [lb-in]	2.6-181 [23-1,601]
Rated Speed n_N	min^{-1} (rpm)	0-10,000
Rated Power P_N	kW [hp]	0.3-28.2 [0.402-37.82]
Rated Torque M_N	Nm [lb-in]	0.98-136 [8.7-1,203]
Moment of Inertia J	kg m^2 [lb-in sec^2 x 10^{-4}]	0.12-81 [1.06-716.7]
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	Water *

* The standard cooling agent for AMW servo motors is water. However, different types of coolants (e.g. oils, antifreeze mixtures, etc.) with varying temperature ranges are available upon request.

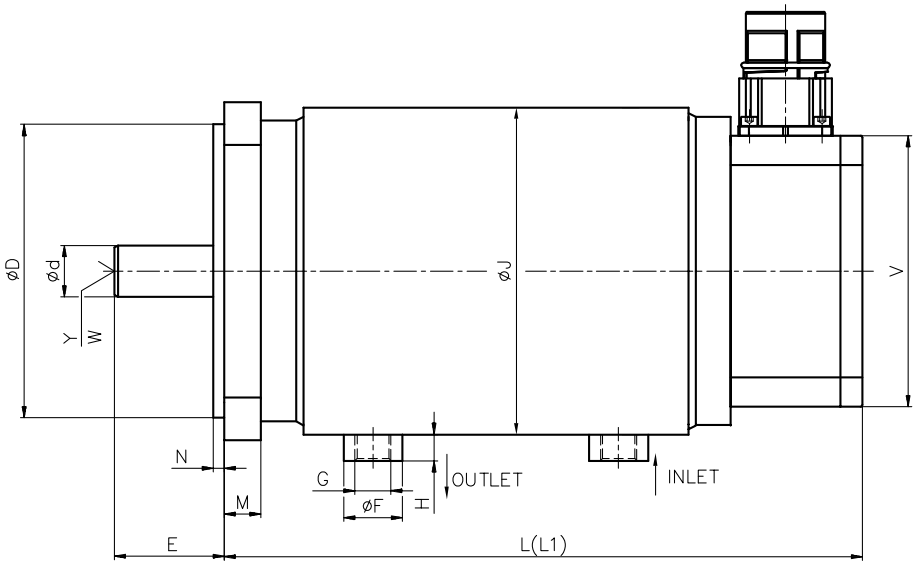


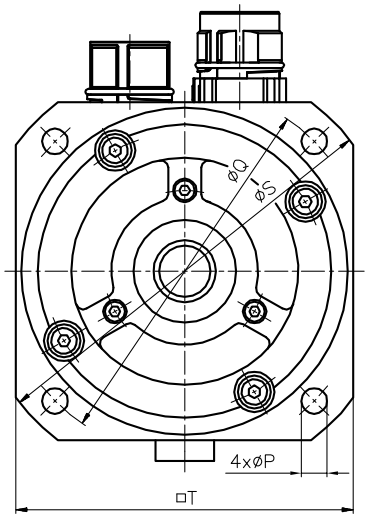
DIMENSIONAL DETAILS

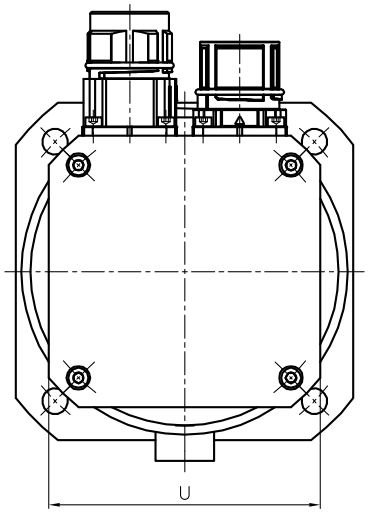
AMW SERIES

TYPE	d	D	E	F	G	H	J	L	L1	M	N	P	Q	S	□T	U	V	W	Y
	mm																		
AMW256	9k6	40j6	24	16	G1/8"	7	63.5	152	185	8	2.5	5.8	63	74	55	53	50	-	ISO 6411-B 2/6,3
AMW258	9k6	40j6	24	16	G1/8"	7	63.5	182	215	8	2.5	5.8	63	74	55	53	50	-	ISO 6411-B 2/6,3
AMW404	14k6	80j6	30	16	G1/8"	7.5	89	137	169	10	3	7	100	115	92	74	74	12.5	DIN 332-DS M5
AMW406	14k6	80j6	30	16	G1/8"	7.5	89	173	205	10	3	7	100	115	92	74	74	12.5	DIN 332-DS M5
AMW506	19k6	95j6	40	16	G1/8"	8	108	245	276	10	3	9	115	134	105	97	97	16	DIN 332-DS M6
AMW508	19k6	95j6	40	16	G1/8"	8	108	290	321	10	3	9	115	134	105	97	97	16	DIN 332-DS M6
AMW714	24k6	130j6	50	20	G1/4"	12	159	294	343	19	3.5	11	165	186	135	135	135	19	DIN 332-DS M8
AMW716	24k6	130j6	50	20	G1/4"	12	159	344	393	19	3.5	11	165	186	135	135	135	19	DIN 332-DS M8
AMW718	24k6	130j6	50	20	G1/4"	12	159	394	443	19	3.5	11	165	186	135	135	135	19	DIN 332-DS M8
AMW904	32k6	180j6	58	20	G1/4"	13	219	340	390	22	3.5	14	215	242	190	190	190	28	DIN 332-DS M12
AMW906	32k6	180j6	58	20	G1/4"	13	219	415	465	22	3.5	14	215	242	190	190	190	28	DIN 332-DS M12

L (without brake) L1 (with brake) W = thread depth







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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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