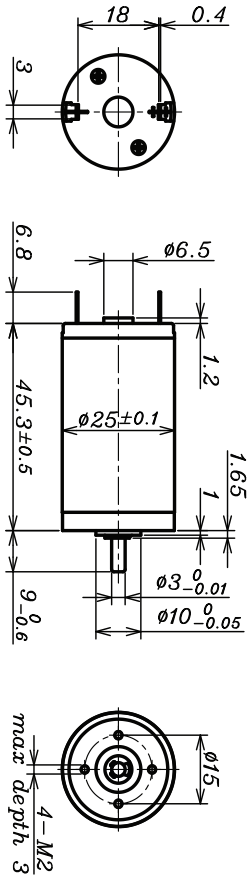




# DC Coreless Motor AM-CL2545MA/B Series

**ASSUN MOTOR**

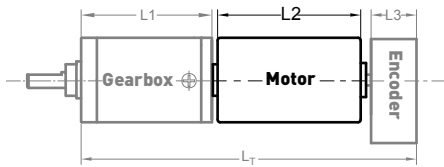
2015 edition. Specifications are subject to change without notice.



		PRECIOUS METAL BRUSH				BALL BEARING			
MOTOR MODEL		0606	0604	1206	1204	2406	2404	4806	4804
<b>NOMINAL VOLTAGE</b>	<b>V</b>	6	6	12	12	24	24	48	48
<b>NO LOAD SPEED ±12%</b>	<b>rpm</b>	5960	4070	5920	4100	6020	4250	6850	4260
<b>NO LOAD CURRENT Max 150%</b>	<b>mA</b>	88	47	38	26	24	14	13	7
Recommend Limit for Continuous Operating	<b>mN.m</b>	8.2	12.6	17.6	18.2	18.8	22.3	20.4	27.1
	<b>rpm</b>	5641	3583	5251	3461	5347	3472	6102	3472
	<b>mA</b>	950	950	950	680	520	430	320	260
	<b>W</b>	4.9	4.7	9.7	6.6	10.5	8.1	13.1	9.8
<b>STARTING CURRENT</b>	<b>mA</b>	16216	7595	8108	4225	4461	2286	2824	1375
<b>STALL TORQUE</b>	<b>mN.m</b>	154.2	105.6	155.5	116.6	168.0	121.8	187.2	146.5
<b>MAXIMUM POWER OUTPUT</b>	<b>W</b>	24.1	11.3	24.1	12.5	26.5	13.5	33.6	16.3
<b>MAXIMUM EFFICIENCY</b>	<b>%</b>	86	85	87	85	86	85	87	86
<b>TERMINAL RESISTANCE PHASE TO PHASE ±12%</b>	<b>Ω</b>	0.37	0.79	1.48	2.84	5.38	10.5	17.0	34.9
<b>INDUCTANCE (1kHz)</b>	<b>mH</b>	0.03	0.07	0.15	0.36	0.60	1.19	2.05	3.6
<b>MECHANICAL TIME CONSTANT</b>	<b>ms</b>	5.0	5.4	5.3	5.2	5.1	5.0	5.2	3.9
<b>MOMENT OF INERTIA</b>	<b>gcm<sup>2</sup></b>	12.3	13.5	13.4	14.2	13.5	13.6	13.6	12.9
<b>TORQUE CONSTANT</b>	<b>mN.m/A</b>	9.6	14.0	19.3	27.8	37.9	53.6	66.6	107.1
<b>SPEED CONSTANT</b>	<b>rpm/V</b>	999	68.3	496	344	252	178	143	89
<b>SPEED/TORQUE GRADIENT</b>	<b>rpm/mN.m</b>	38.6	38.5	38.1	35.1	35.8	34.9	36.6	29.1
<b>WEIGHT</b>	<b>g</b>	108	108	108	108	108	108	108	108

ADDITIONAL INFORMATION			
MAXIMUM ROLLING BEARING LOADS			
<b>AXIAL (DYNAMIX)</b>	7.3 N	<b>RADIAL ( 5MM FROM HEAD FACE)</b>	20 N
<b>PRESS-FIT FORCE</b>	60(120) N	<b>L: MAX ALLOWABLE SCREW DEPTH INTO FLANGE</b>	3.0 mm
<b>MAXIMUM RADIAL PLAY</b>	≤0.02mm	<b>AXIAL PLAY:</b>	PRESET
<b>MAXIMUM WINDING TEMPERATURE</b>	85°C	<b>AMBIENT TEMPERATURE RANGE:</b>	-30 to 65°C

## AM-CL2545MA/B COMBINATION SCHEME



Recommend Gearbox:  
Planetary Gearbox:  
AM-26P  
AM-28P

Recommend Encoder:  
Encoder S: AM-EN16-S\*\*\*  
2-3 Channels

For more gearbox specs, see Assun Motor website.

TOTAL LENGTH (GEARBOX AND MOTOR): L <sub>T</sub> = L <sub>1</sub> +L <sub>2</sub> + L <sub>3</sub>		
L1:28P	L2: CL25	L3:EN16-S
28.4	45.3	10.7
34.7		
41.0		
47.3		

## REMARKS

Clients can choose gearbox and encoder to match with this motor. Some combinations are listed here for reference.

Motor Data Tested at 25°. Motor Operation exceeds continuous limits of operating range will compromise the life of the device.