



# DC Coreless Motor AM-CL2232GA/B Series

**ASSUN MOTOR**

2015 edition. Specifications are subject to change without notice.

## GRAPHITE BRUSH

## BALL BEARING

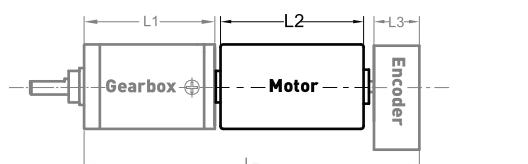
MOTOR MODEL	0609	0606	1209	1206	2409	2406
<b>NOMINAL VOLTAGE</b>	<b>V</b>	6	6	12	12	24
<b>NO LOAD SPEED</b> ±12%	<b>rpm</b>	8622	6285	8683	5735	9183
<b>NO LOAD CURRENT</b> Max 150%	<b>mA</b>	87	51	45	25	26
Recommend Limit for Continuous Operating	<b>mN.m</b>	5.0	6.7	7.3	8.4	7.3
	<b>rpm</b>	7735	5093	7385	4229	7988
	<b>mA</b>	850	800	600	450	320
	<b>W</b>	4.1	3.6	5.6	3.7	6.1
<b>STARTING CURRENT</b>	<b>mA</b>	7500	4918	5556	2752	2330
<b>STALL TORQUE</b>	<b>mN.m</b>	49	36	50	32	56
<b>MAXIMUM POWER OUTPUT</b>	<b>W</b>	11.0	5.8	11.3	4.8	13.4
<b>MAXIMUM EFFICIENCY</b>	<b>%</b>	80	79	80	77	80
<b>TERMINAL RESISTANCE PHASE TO PHASE</b> ±12%	<b>Ω</b>	0.8	1.5	3.1	7.3	10.5
<b>INDUCTANCE</b> (1kHz)	<b>mH</b>	0.36	0.09	0.23	0.44	0.7
<b>MECHANICAL TIME CONSTANT</b>	<b>ms</b>	9.5	9.5	9.3	9.7	8.9
<b>MOMENT OF INERTIA</b>	<b>gcm²</b>	5.15	5.13	5.15	5.15	5.15
<b>TORQUE CONTANT</b>	<b>mN.m/A</b>	6.6	9.0	13.1	19.7	24.7
<b>SPEED CONSTANT</b>	<b>rpm/V</b>	1454	1061	728	485	387
<b>SPEED/TORQUE GRADIENT</b>	<b>rpm/mN.m</b>	177.1	1176.8	172.2	180.0	164.7
<b>WEIGHT</b>	<b>g</b>	57.0	57.1	56.5	57.0	56.8

## ADDITIONAL INFORMATION

### MAXIMUM ROLLING BEARING LOADS

<b>AXIAL (DYNAMIX)</b>	5.9 N	<b>RADIAL ( 5MM FROM HEAD FACE)</b>	8.0 N
<b>PRESS-FIT FORCE</b>	16(90) N	<b>L: MAX ALLOWABLE SCREW DEPTH INTO FLANGE</b>	2.5 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-CL2232GA/B COMBINATION SCHEME



Recommend Gearbox:  
Planetary Gearbox:  
AM-22P

Recommend Encoder:  
Encoder S: AM-EN22-S\*\*\*  
2-3 Channels

### TOTAL LENGTH (GEARBOX AND MOTOR): $L_T = L_1 + L_2 + L_3$

L1:22P	L2: CL22	L3:EN22-S
22.4	32.0	10.7
27.5		
32.5		
37.5		
42.6		

For more gearbox specs, see Assun Motor website.

## 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.