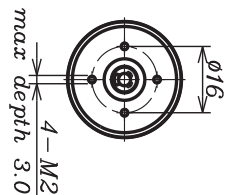
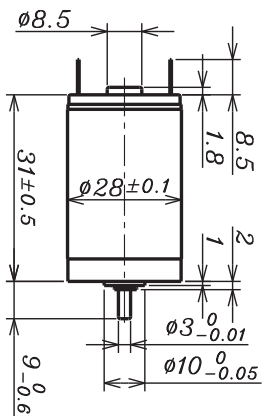
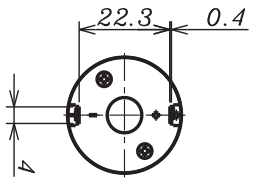




# DC Coreless Motor AM-CL2831MA/B Series

**ASSUN MOTOR**

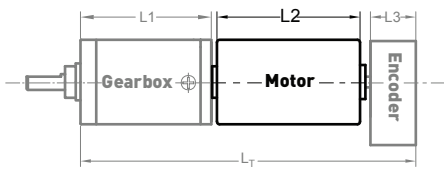
2015 edition. Specifications are subject to change without notice.



		PRECIOUS METAL BRUSH			BALL BEARING				
MOTOR MODEL		0606	0604	1207	1204	2406	2404	4806	4805
<b>NOMINAL VOLTAGE</b>	<b>V</b>	6.0	6.0	12.0	12.0	24.0	24.0	48.0	48.0
<b>NO LOAD SPEED ±12%</b>	<b>rpm</b>	6276	3960	7437	4000	6050	4288	6430	5704
<b>NO LOAD CURRENT Max 150%</b>	<b>mA</b>	45	25	30	13	10	6.5	6.5	5.3
Recommend Limit for Continuous Operating	<b>mN.m</b>	5.9	8.3	5.7	8.1	9.0	11.3	10.2	9.1
	<b>rpm</b>	5690	3195	6860	3199	5186	3130	5371	4742
	<b>mA</b>	700	600	400	300	250	220	150	120
	<b>W</b>	3.5	2.8	4.1	2.7	4.9	3.7	5.7	4.5
<b>STARTING CURRENT</b>	<b>mA</b>	7059	3000	4800	1446	1690	797	878	686
<b>STALL TORQUE</b>	<b>mN.m</b>	64	43	73	41	63	42	62	54
<b>MAXIMUM POWER OUTPUT</b>	<b>W</b>	10.5	4.4	14.2	4.3	10.0	4.7	10.4	8.1
<b>MAXIMUM EFFICIENCY</b>	<b>%</b>	85	83	85	82	85	83	84	83
<b>TERMINAL RESISTANCE PHASE TO PHASE ±12%</b>	<b>Ω</b>	0.85	2.0	2.5	8.3	14.2	30.1	54.7	70.0
<b>INDUCTANCE (1kHz)</b>	<b>mH</b>	0.063	0.17	0.19	0.69	1.2	2.4	4.1	5.1
<b>MECHANICAL TIME CONSTANT</b>	<b>ms</b>	17.1	16.1	16.1	16.1	15.6	16.4	17.3	17.7
<b>MOMENT OF INERTIA</b>	<b>gcm<sup>2</sup></b>	16.6	16.6	15.6	15.6	15.6	15.3	15.8	16.1
<b>TORQUE CONSTANT</b>	<b>mN.m/A</b>	9.1	14.3	15.3	28.4	37.7	53.0	70.8	79.7
<b>SPEED CONSTANT</b>	<b>rpm/V</b>	1053	666	624	336	254	180	135	120
<b>SPEED/TORQUE GRADIENT</b>	<b>rpm/mN.m</b>	98.6	92.8	101.8	98.3	95.6	102.3	104.3	105.1
<b>WEIGHT</b>	<b>g</b>	86.2	86.2	85.3	85.3	85.3	85	85.3	85.2

ADDITIONAL INFORMATION			
MAXIMUM ROLLING BEARING LOADS			
<b>AXIAL (DYNAMIX)</b>	7.3 N	<b>RADIAL ( 5MM FROM HEAD FACE)</b>	24 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-CL2831MA/B COMBINATION SCHEME



Recommend Gearbox:  
Planetary Gearbox:  
AM-28P  
AM-32P

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

For more gearbox specs, see Assun Motor website.

TOTAL LENGTH (GEARBOX AND MOTOR): $L_T = L_1 + L_2 + L_3$			
L1: 28P	L1: 32P	L2: CL28	L3: EN16-S
28.4	31.2	31.0	10.7
34.7	38.6		
41.0	46.2		
47.3	53.5		

## 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.