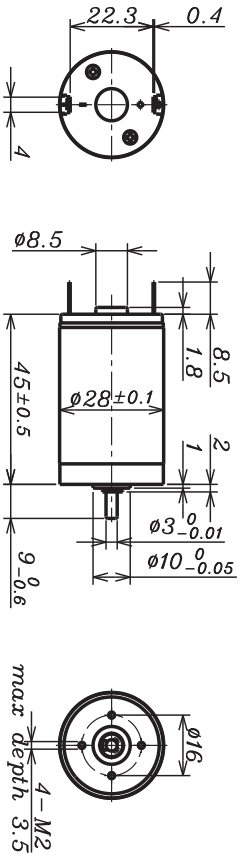
DC Coreless Motor
AM-CL2845MA/B Series

ASSUN MOTOR

2015 edition. Specifications are subject to change without notice.



PRECIOUS METAL BRUSH — BALL BEARING

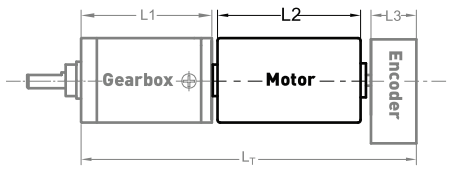
MOTOR MODEL		0606	0604	1206	1204	2406	2404	4806	4804
NOMINAL VOLTAGE	V	6	6	12	12	24	24	48	48
NO LOAD SPEED ±12%	rpm	6150	4450	6240	4350	5960	4536	6520	4280
NO LOAD CURRENT Max 150%	mA	91	59	53	35	25	12	14	9
Recommend Limit for Continuous Operating	mN.m	8.0	11.4	16.4	21.6	22.8	24.6	29.1	34.2
	rpm	5911	4151	5837	3794	5396	3944	5834	3578
	mA	950	950	950	860	620	500	430	330
	W	4.9	5.0	10.0	8.6	12.9	10.2	17.8	12.8
STARTING CURRENT	mA	22222	13333	13953	6486	6316	3750	3967	1967
STALL TORQUE	mN.m	205.3	170.2	254.3	169.0	240.9	188.3	276.9	208.8
MAXIMUM POWER OUTPUT	W	33.1	19.8	41.5	19.3	37.6	22.4	47.3	23.4
MAXIMUM EFFICIENCY	%	88	87	88	86	88	89	88	87
TERMINAL RESISTANCE PHASE TO PHASE ±12%	Ω	0.27	0.45	0.86	1.85	3.80	6.4	12.1	24.4
INDUCTANCE (1kHz)	mH	0.02	0.05	0.11	0.21	0.47	0.77	1.47	3.00
MECHANICAL TIME CONSTANT	ms	6.3	6.0	5.2	5.3	5.1	5.0	4.8	4.1
MOMENT OF INERTIA	gcm²	20.1	21.8	20.4	19.8	19.5	19.8	19.5	19.0
TORQUE CONTANT	mN.m/A	9.3	12.8	18.3	26.2	38.3	50.4	70.1	106.6
SPEED CONSTANT	rpm/V	1029	745	522	364	249	190	136	90
SPEED/TORQUE GRADIENT	rpm/mN.m	30.0	26.2	24.5	25.7	24.7	24.1	23.5	20.5
WEIGHT	g	140	140	136	136	136	136	136	136

ADDITIONAL INFORMATION

MAXIMUM ROLLING BEARING LOADS

AXIAL (DYNAMIX)	7.3 N	RADIAL (5MM FROM HEAD FACE)	28 N
PRESS-FIT FORCE	60(120) N	L: MAX ALLOWABLE SCREW DEPTH INTO FLANGE	3.5 mm
MAXIMUM RADIAL PLAY	≤0.02mm	AXIAL PLAY:	PRESET
MAXIMUM WINDING TEMPERATURE	85°C	AMBIENT TEMPERATURE RANGE:	-30 to 65°C

AM-CL2845MA/B COMBINATION SCHEME



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	45.0	10.7
34.7	38.6		
41.0	46.2		
47.3	53.5		

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.

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.