



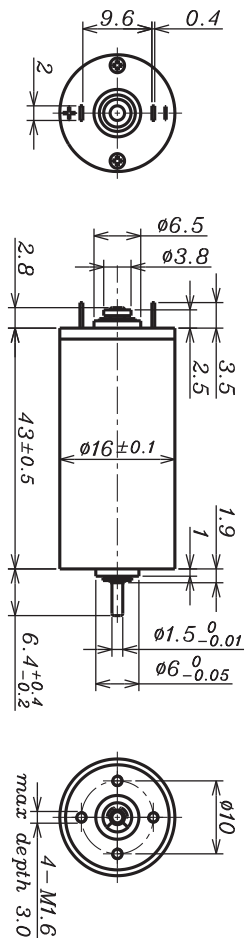
DC Coreless Motor AM-CL1643MA/B Series

ASSUN MOTOR

2015 edition. Specifications are subject to change without notice.

PRECIOUS METAL BRUSH

BALL BEARING



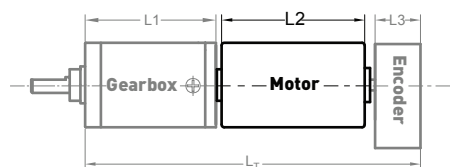
MOTOR MODEL		0307	0305	0607	0605	0907	1206	1204	2607
NOMINAL VOLTAGE	V	3	3	6	6	9	12	12	26
NO LOAD SPEED ±12%	rpm	6730	5242	6620	4978	6878	6360	4400	7080
NO LOAD CURRENT Max 150%	mA	65	50	32	23	24	16	10	10
Recommend Limit for Continuous Operating	mN.m	3.3	4.0	5.3	5.4	5.3	5.4	6.2	5.2
	rpm	5768	4058	5207	3607	5462	5008	2728	5580
	mA	850	800	650	500	450	320	250	160
	W	2.0	1.7	2.9	2.0	3.0	2.8	1.8	3.0
STARTING CURRENT	mA	5556	3371	2927	1754	2093	1446	642	718
STALL TORQUE	mN.m	23	18	25	20	26	25	16	24
MAXIMUM POWER OUTPUT	W	4.1	2.5	4.3	2.6	4.6	4.2	1.9	4.5
MAXIMUM EFFICIENCY	%	80	77	80	78	80	80	77	78
TERMINAL RESISTANCE PHASE TO PHASE ±12%	Ω	0.54	0.89	2.05	3.42	4.3	8.3	18.7	36.2
INDUCTANCE (1kHz)	mH	0.018	0.037	0.11	0.21	0.24	0.52	1.1	2.01
MECHANICAL TIME CONSTANT	ms	9.3	9.0	8.2	8.2	8.7	7.7	8.3	8.7
MOMENT OF INERTIA	gcm²	3.04	2.94	2.94	3.11	3.07	2.94	2.91	2.87
TORQUE CONSTANT	mN.m/A	4.2	5.4	8.6	11.4	12.4	17.8	25.6	34.6
SPEED CONSTANT	rpm/V	2270	1174	1116	841	773	536	372	276
SPEED/TORQUE GRADIENT	rpm/mN.m	291	293	267	253	269	250	272	289
WEIGHT	g	38.9	38.6	387	40.1	40.1	38.7	38.5	38.4

ADDITIONAL INFORMATION

MAXIMUM ROLLING BEARING LOADS

AXIAL (DYNAMIX)	1.0 N	RADIAL (5MM FROM HEAD FACE)	1.8 N
PRESS-FIT FORCE	16(70) N	L: MAX ALLOWABLE SCREW DEPTH INTO FLANGE	3.0 mm
MAXIMUM RADIAL PLAY	≤0.02mm	AXIAL PLAY:	PRESET
MAXIMUM WINDING TEMPERATURE	85°C	AMBIENT TEMPERATURE RANGE:	-30 to 65°C

AM-CL1643MA/B COMBINATION SCHEME



Recommend Gearbox:
Planetary Gearbox:
AM-16P

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

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

L1:16P	L2: CL16	L3: EN-16-S
17.9	43.0	10.7
21.8		
25.2		
28.6		
32.0		

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.