

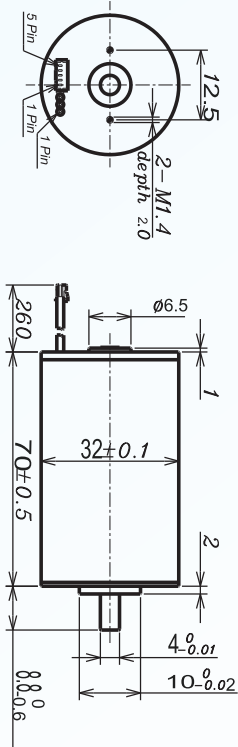


DC Brushless Motor AM-BL3270A/B-4P Series

ASSUN MOTOR

2015 edition. Specifications are subject to change without notice.

BRUSHLESS MOTOR BALL BEARING

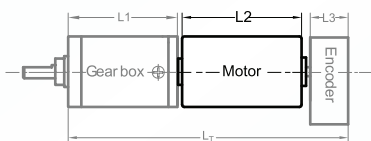


MOTOR MODEL		1208	1207	2409	2407	3609	3607
NOMINAL VOLTAGE	V	12	12	24	24	36	36
NO LOAD SPEED ±12%	rpm	8426	6741	8988	7095	8792	7222
NO LOAD CURRENT Max 150%	mA	750	500	375	250	250	167
Recommend Limit for Continuous Operating	mN.m	125.8	139.4	123.0	140.5	123.2	139.6
	rpm	7653	5959	8325	6347	8128	6513
	A	10.00	8.70	5.2	4.60	3.40	3.10
	W	100.83	86.99	107.27	93.39	104.83	95.22
STARTING CURRENT	mA	109091	750000	70588	43636	45000	31579
STALL TORQUE	mN.m	11484	1275	1800	1409	1760	1503
MAXIMUM POWER OUTPUT	W	327.3	225.0	423.5	261.8	405.0	284.2
MAXIMUM EFFICIENCY	%	84	84	86	85	86	86
TERMINAL RESISTANCE PHASE TO PHASE ±12%	Ω	0.11	0.16	0.34	0.55	0.80	1.14
MECHANICAL TIME CONSTANT	ms	1.12	1.05	0.99	1.00	0.99	0.95
MOMENT OF INERTIA	gcm ²	18.9	18.9	18.9	18.9	18.9	18.9
TORQUE CONSTANT	mN.m/A	13.6	17.0	25.5	32.3	39.1	47.6
SPEED CONSTANT	rpm/V	702	562	374	296	244	201
SPEED/TORQUE GRADIENT	rpm/mN.m	5.7	5.3	5.0	5.0	5.0	4.8
WEIGHT	g	280	280	280	280	280	280

ADDITIONAL INFORMATION

MAXIMUM ROLLING BEARING LOADS	
AXIAL (DYNAMIX)	6 N
PRESS-FIT FORCE	110 N
MAXIMUM RADIAL PLAY	≤0.02mm
MAXIMUM WINDING TEMPERATURE	155°C
RADIAL (5MM FROM HEAD FACE)	28 N
L: MAX ALLOWABLE SCREW DEPTH INTO FLANGE	4.0 mm
AXIAL PLAY:	0 (<6.0N)
AMBIENT TEMPERATURE RANGE:	-30 to 65°C

AM-BL3670A/B COMBINATION SCHEME



Recommend Gearbox:
Planetary Gearbox:
AM-36P
AM-45P

Recommend Encoder:
Encoder S: AM-EN22-S***
2~3 Channels
Encoder T: AM-EN36-T***
2~3 Channels

For more gearbox specs, see Assun Motor website.

CONNECTION (AWG22#)	TOTAL LENGTH (GEARBOX AND MOTOR): L _T =L ₁ +L ₂ + L ₃				
	L1:36P	L1:45P	L2:BL36	L3:EN22-S	L3:EN36-T
CABLE 1: WINDING A					
CABLE 2: WINDING B	34.1	38.6	70.0	10.7	10.0
CABLE 3: WINDING C	42.7	49.4			12.0
PLUG DEFINATION MOLEX: 51021 - 0500	51.3	60.2			
	59.9	71.0			
PLUG 1: HALL V _{CC}					
PLUG 2: HALL GND					
PLUG 3: HALL A					
PLUG 4: HALL B					
PLUG 5: HALL C					

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.