



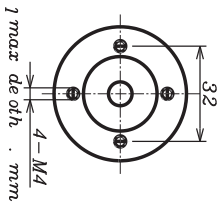
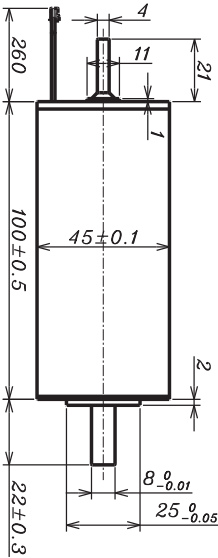
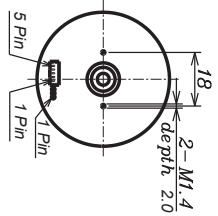
DC Brushless Motor AM-BL45100A/B Series

ASSUN MOTOR

2015 edition. Specifications are subject to change without notice.

BRUSHLESS MOTOR

BALL BEARING



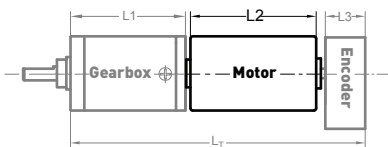
MOTOR MODEL		2411	2406	3610	3606	4810	4806
NOMINAL VOLTAGE	V	24	24	36	36	48	48
NO LOAD SPEED ±12%	rpm	11240	5900	10340	6380	10360	6450
NO LOAD CURRENT Max 150%	mA	600	320	390	200	370	190
	mN.m	69.0	161.5	69.9	123.3	49.8	120.8
Recommend Limit for	rpm	10984	5466	10127	6032	10215	6108
Continuous	mA	4000	4500	2500	2500	1500	1900
Operating	W	79.4	92.4	74.1	77.9	53.2	77.3
STARTING CURRENT	mA	150000	57143	102857	42353	81356	32432
STALL TORQUE	mN.m	3034	2195	3394	2261	3567	2278
MAXIMUM POWER OUTPUT	W	892.8	339.0	918.7	377.6	967.4	384.6
MAXIMUM EFFICIENCY	%	88	86	88	87	87	85
TERMINAL RESISTANCE PHASE TO PHASE ±12%	Ω	0.16	0.42	0.35	0.85	0.59	1.48
INDUCTANCE (1kHz)	mH	0.035	0.14	0.11	0.31	0.21	0.55
MECHANICAL TIME CONSTANT	ms	4.3	3.1	3.5	3.2	3.3	3.3
MOMENT OF INERTIA	gcm²	109.8	109.8	109.8	109.8	109.8	109.8
TORQUE CONSTANT	mN.m/A	20.3	38.6	33.1	53.6	44.0	70.6
SPEED CONSTANT	rpm/V	470	247	288	178	217	135
SPEED/TORQUE GRADIENT	rpm/mN.m	3.7	2.7	3.0	2.8	2.9	2.8
WEIGHT	g	846.5	850.2	852.5	841.5	847.5	840.3

ADDITIONAL INFORMATION

MAXIMUM ROLLING BEARING LOADS

AXIAL (DYNAMIX)	8 N	RADIAL (5MM FROM HEAD FACE)	180 N
PRESS-FIT FORCE	170 N	L: MAX ALLOWABLE SCREW DEPTH INTO FLANGE	4.5 mm
MAXIMUM RADIAL PLAY	≤0.02mm	AXIAL PLAY:	0 (<6.0N)
MAXIMUM WINDING TEMPERATURE	85°C	AMBIENT TEMPERATURE RANGE:	-30 to 65°C

AM-BL45100A/B COMBINATION SCHEME



Recommend Gearbox:
Planetary Gearbox:
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#)

CABLE 1: WINDING A

CABLE 2: WINDING B

CABLE 3: WINDING C

PLUG DEFINATION

MOLEX: 51021 - 0500

PLUG 1: HALL V

PLUG 2: HALL GND

PLUG 3: HALL A

PLUG 4: HALL B

PLUG 5: HALL C

TOTAL LENGTH (GEARBOX AND MOTOR): L_T= L₁+L₂+ L₃

L1:45P

L2:BL45

L3:EN22-S

L3:EN36-T

38.6

100.0

10.7

10.0

49.4

12.0

60.2

71.0

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.

ASSUN MOTOR

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