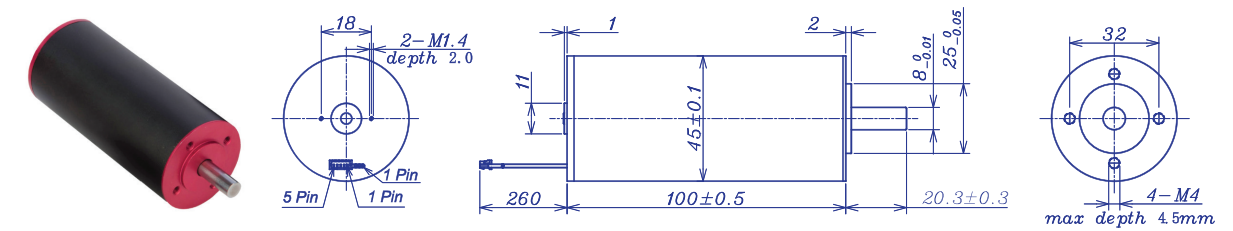
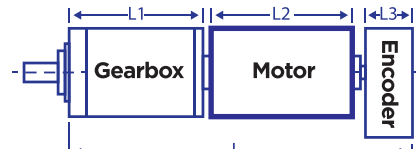


DC BRUSHLESS MOTOR HIGH TEMPERATURE SERIES



AM-BL45100AE Series

								
Brushless Motor			Ball Bearings					
Motor Model		2411	2406	3610	3606	4810	4806	
Nominal voltage	V	24	24	36	36	48	48	
No load speed $\pm 12\%$	rpm	11240	5900	10340	6380	10360	6450	
No load current Max 150%	mA	600	320	390	200	370	190	
Recommend limit for continuous operating	Max cont. torque	mN.m	160.4	238.7	179.2	246.7	151.1	233.8
	Rated Speed	rpm	10646	5258	9794	5684	9921	5788
	Rated Current	mA	8500	6500	5800	4800	3800	3500
	Rated Power	W	178.9	131.4	183.8	146.8	156.9	141.7
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	1339.0	918.7	377.6	967.4	384.6	
Maximum Efficiency	%	88	86	88	87	87	85	
Terminal resistance $\pm 12\%$	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	gcm ²	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	850.0	852.5	841.5	847.5	840.3	
ADDITIONAL INFORMATION								
Motor thermal resistance:		3.6K/W		Motor thermal time constant:		1286S		
Axial (dynamic):		8.0 N		Radial (5mm from mounting face):		180.0 N		
Press-fit force (static):		170N		Max allowable screw depth into flange:		4.5mm		
Maximum radial play (5mm from mounting face):		≤ 0.02 mm		Axial play:		0 (<8.0N)		
Maximum winding temperature:		125°C		Ambient temperature range:		-30 to 65°C		
Standard rear shaft diameter:		8 mm		Standard rear shaft length "L":		0/3.7/5.5 mm		
Connection (AWG 18#)		Total Length: $L_T=L_1+L_2+L_3$					 AM-BL45100AE Combination Scheme Recommended Gearbox: Planetary Gearbox: AM-45GP AM-52GP Recommended Encoder: Encoder S: AM-EN2211S*** 2~3 Channels Encoder T: AM-EN3612*** 2~3 Channels For more combination specs, visit Assun Motor website.	
Cable 1: Yellow Winding A		L1:45GP	L1:52GP	L2:BL45	L3:EN22S	L3:EN36T		
Cable 2: Red Winding B		60.1	79.3	100.0	10.7	12.0		
Cable 3: Blue Winding C		72.1						
Plug definition (AWG 28#) Molex: 51021-0500								
Plug 1: Brown Hall 3~16V								
Plug 2: Black Hall GND								
Plug 3: Yellow Hall A								
Plug 4: Red Hall B								
Plug 5: Blue Hall C								
Remarks: Client can choose gearbox and encoder to match with this motor. Some combinations are listed here for reference.								
Motor data tested at 25°C. Motor operation exceeding continuous limits will reduce life or result in damage. At elevated ambient temperatures, load current must be reduced.								

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