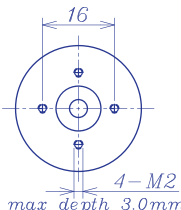
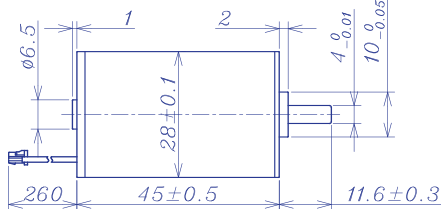
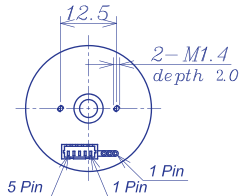
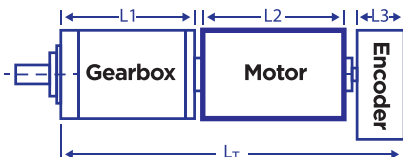


AM-BL2845AN Series

								
Brushless Motor			Ball Bearings					
Motor Model			1215	1210	1813	1810	2412	2409
Nominal voltage		V	12	12	18	18	24	24
No load speed ±12%		rpm	14800	10000	12520	9680	11680	9080
No load current Max 150%		mA	300	190	170	120	120	85
Recommend limit for continuous operating	Max cont. torque	mN.m	28.4	34.2	30.4	33.1	28.8	35.4
	Rated Speed	rpm	13374	8455	11222	8282	10401	7593
	Rated Current	mA	4000	3200	2400	2000	1600	1500
	Rated Power	W	39.8	30.2	35.7	28.7	31.4	28.1
Starting current		mA	60000	19672	21687	13139	13636	8727
Stall torque		mN.m	295	221	293	229	263	216
Maximum power output		W	114.3	57.9	96.1	58.0	80.4	51.3
Maximum Efficiency		%	83	81	83	82	82	81
Terminal resistance ±12%		Ω	0.31	0.61	0.83	1.37	1.76	2.75
Inductance (1KH ₂)		mH	0.034	0.086	0.126	0.22	0.27	0.46
Mechanical time constant		ms	3.3	2.9	2.8	2.7	2.9	2.7
Moment of inertia		gcm ²	6.19	6.19	6.19	6.19	6.19	6.19
Torque constant		mN.m/A	7.7	11.3	13.6	17.6	19.4	25.0
Speed constant		rpm/V	1243	841	701	543	491	382
Speed/torque gradient		rpm/mN.m	50.2	45.2	42.7	42.3	44.4	42.0
Weight		g	138.8	138.7	139.1	140.1	138.4	139.2
ADDITIONAL INFORMATION								
Motor thermal resistance:			10.2 K/W		Motor thermal time constant:			822 S
Axial (dynamic):			4.0 N		Radial (5mm from mounting face):			16.0 N
Press-fit force (static):			110 N		Max allowable screw depth into flange:			3.0 mm
Maximum radial play (5mm from mounting face):			≤0.02 mm		Axial play:			0 (<4.0N)
Maximum winding temperature:			85°C		Ambient temperature range:			-30 to 65°C
Standard rear shaft diameter:			4 mm		Standard rear shaft length "L":			0/3.7/5.5 mm
Connection (AWG 22#)		Total Length: L _T =L ₁ +L ₂ +L ₃						
Cable 1:Yellow	Winding A	L1:28GP	L1:32GP	L2:BL28	L3:EN16S	L3:EN16T		
Cable 2:Red	Winding B	26.1	27.4	45.0	10.7	12.0		
Cable 3: Blue	Winding C	33.3	35.9					
Plug definition (AWG 28#) Molex:51021-0500		40.5	44.4					
		47.7	52.9					
Plug 1: Brown	Hall 3~16V							
Plug 2: Black	Hall GND	Remarks: Client can choose gearbox and encoder to match with this motor. Some combinations are listed here for reference.						
Plug 3 :Yellow	Hall A							
Plug 4: Red	Hall B							
Plug 5 :Blue	Hall C							
 AM-BL2845AN Combination Scheme Recommended Gearbox: Planetary Gearbox: AM-28GP AM-32GP Recommended Encoder: Encoder S: AM-EN1611S*** 2~3 Channels Encoder T: AM-EN1612T*** 2~3 Channels For more combination specs, visit Assun Motor website.								
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.								

Download datasheet: <https://assunmotor.com/documents-download>

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