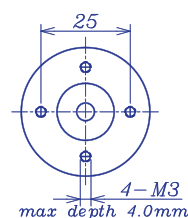
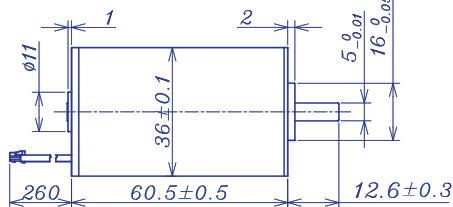
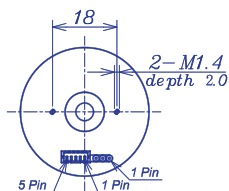


AM-BD3660AN Series



⚠ Incorrect wiring will damage the built-in driver of the motor!

		Brushless Motor		Ball Bearings				
Motor Model			1211	1209	2413	2410	2408	2407
Nominal voltage		V	12	12	24	24	24	24
No load speed	±12%	rpm	11200	8840	12500	10200	8200	6966
No load current	Max 150%	mA	320	230	220	165	100	85
Recommend limit for continuous operating	Max cont. torque	mN.m	39.5	43.4	32.5	41.0	50.0	56.1
	Rated Speed	rpm	10472	8066	11997	9525	7409	6116
	Rated Current	mA	4200	3600	2000	2000	1900	1800
	Rated Power	W	43.3	36.7	40.8	40.9	38.8	35.9
Starting current		mA	60000	38710	44444	27907	18750	14118
Stall torque		mN.m	607	496	807	620	518	459
Maximum power output		W	178.1	114.8	264.0	165.5	111.3	83.7
Maximum Efficiency		%	86	85	86	85	86	85
Operating Range		V	10~28	10~28	10~28	10~28	10~28	10~28
Type of Current			Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Mechanical time constant		ms	3.2	3.1	2.7	2.9	2.8	2.7
Moment of inertia		gcm ²	16.75	16.75	16.75	16.75	16.75	16.75
Torque constant		mN.m/A	10.2	12.9	18.2	22.3	27.8	32.7
Speed constant		rpm/V	938	741	523	428	343	292
Speed/torque gradient		rpm/mN.m	18.4	17.8	15.5	16.5	15.8	15.2
Weight		g	326.3	326.8	327.4	327.2	328.1	328.4

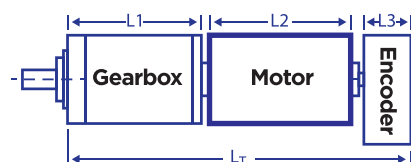
ADDITIONAL INFORMATION

Motor thermal resistance:	6.9 K/W	Motor thermal time constant:	1188 S
Axial (dynamic):	6.0 N	Radial (5mm from mounting face):	28.0 N
Press-fit force (static):	110 N	Max allowable screw depth into flange:	4.0 mm
Maximum radial play (5mm from mounting face):	≤0.02 mm	Axial play:	0 (<6.0N)
Maximum winding temperature:	85°C	Ambient temperature range:	-30 to 65°C
Standard rear shaft diameter:	5 mm	Standard rear shaft length "L":	0/3.7/5.5 mm

Connection (AWG 20#)		Total Length: L _T =L ₁ +L ₂ +L ₃				
		L1:36GP	L1:40GP	L2:BD36	L3:EN22S	L3:EN36T
Cable 1: Red	+Vcc	30.6	35.3	60.5	10.7	12.0
Cable 2: Blue	GND	39.6	46.8			
Plug definition (AWG 28#) Molex: 51021-0500		48.6	58.3			
		57.6	69.8			
Plug 1: Brown	GND					
Plug 2: Black	FG Pulse					
Plug 3: Yellow	CW/CCW					
Plug 4: Red	PWM					
Plug 5: Blue	Brake					

Remarks: Client can choose gearbox and encoder to match with this motor. Some combinations are listed here for reference.

AM-BD3660AN Combination Scheme



Recommended Gearbox:

Planetary Gearbox.
AM-36GP
AM-40GP

C

Encoder S: AM-EN2211S***
2~3 Channels

Encoder T: AM-EN3612T***
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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