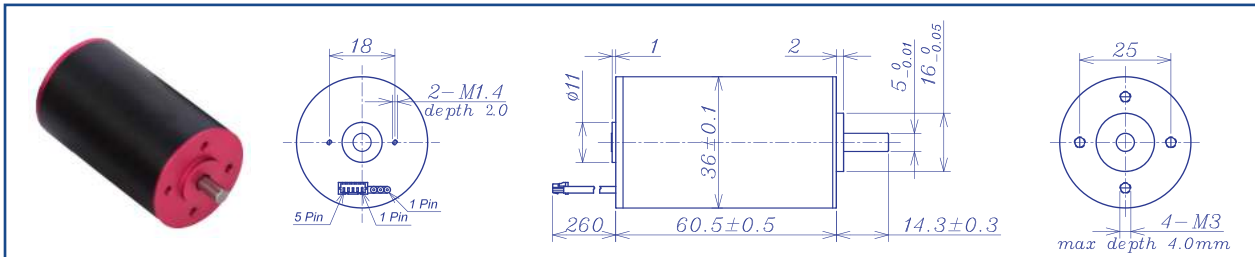


AM-BL3660AN Series

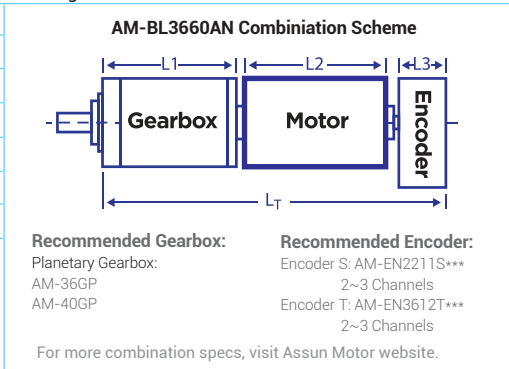


		Brushless Motor				Ball Bearings	
Motor Model		1211	1209	2413	2410	3612	3610
Nominal voltage		V	12	12	24	24	36
No load speed ±12%		rpm	11200	8840	12500	12300	10450
No load current Max 150%		mA	320	230	220	165	105
Recommend limit for continuous operating	Max cont. torque	mN.m	47.6	51.2	36.1	43.2	41.2
	Rated Speed	rpm	10322	7928	11940	9489	11650
	Rated Current	mA	5000	4200	2200	2100	1600
	Rated Power	W	51.5	42.8	45.2	42.9	50.2
Starting current		mA	60000	38710	44444	27907	28125
Stall torque		mN.m	607	496	807	620	779
Maximum power output		W	178.1	114.8	264.0	165.5	188.7
Maximum Efficiency		%	86	85	86	85	87
Terminal resistance ±12%		Ω	0.2	0.31	0.54	0.86	1.28
Inductance (1KHz)		mH	0.027	0.051	0.11	0.17	0.27
Mechanical time constant		ms	3.2	3.1	2.7	2.9	2.8
Moment of inertia		gcm ²	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
Speed constant		rpm/V	938	741	523	428	343
Speed/torque gradient		rpm/mN.m	18.4	17.8	15.5	16.5	15.2
Weight		g	325.8	325.9	326.8	326.9	326.5

ADDITIONAL INFORMATION			
Motor thermal resistance:	6.9 K/W	Motor thermal time constant:	1188S
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				
Cable 1: Yellow Winding A	L1:36GP	L1:40GP	L2:BL36	L3:EN22S	L3:EN36T
Cable 2: Red Winding B	39.6	46.8	60.5	10.7	12.0
Cable 3: Blue Winding C	48.6	58.3			
Plug definition (AWG 28#) Molex: 51021-0500	57.6	69.8			
Plug 1: Red 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.

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