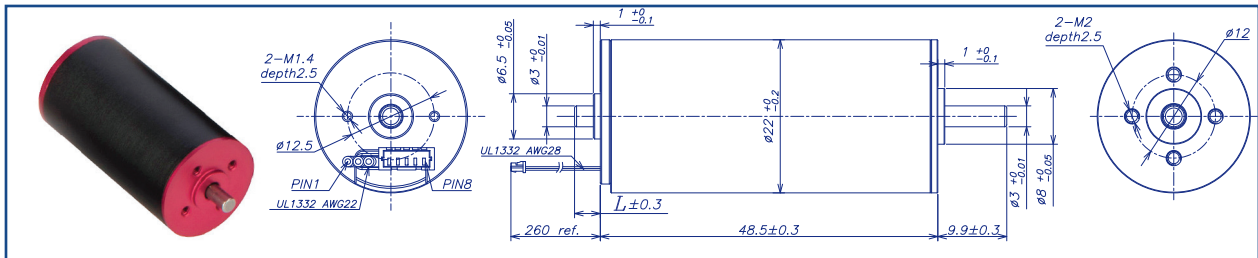


# DC BRUSHLESS MOTOR HIGH TEMPERATURE SERIES



## AM-BL2248BF Series



		Brushless Motor			Ball Bearings		
Motor Model			1206	1806	2406		
Nominal voltage		V	12	18	24		
No load speed ±12%		rpm	5950	6400	6200		
No load current Max 150%		mA	80	60	45		
Recommend limit for continuous operating	Max cont. torque	mN.m	26.4	26.4	26.4		
	Rated Speed	rpm	5000	5500	5300		
	Rated Current	mA	1480	1060	770		
	Rated Power	W	13.8	15.2	14.7		
Starting current		mA	10000	7260	5060		
Stall torque		mN.m	149	190	182		
Maximum power output		W	25.8	31.8	29.5		
Maximum Efficiency		%	81	82	81.7		
Terminal resistance ±12%		Ω	1.3	2.5	4.75		
Inductance (1KHz)		mH	-	-	-		
Mechanical time constant		ms	2.3	2.3	2.3		
Moment of inertia		gcm <sup>2</sup>	2.92	2.92	2.92		
Torque constant		mN.m/A	18.9	26.4	36.2		
Speed constant		rpm/V	505	363	271		
Speed/torque gradient		rpm/mN.m	36	33.5	34.1		
Weight		g	95	95	95		

ADDITIONAL INFORMATION			
Motor thermal resistance:	-K/W	Motor thermal time constant:	-S
Axial (dynamic):	4.0 N	Radial (5mm from mounting face):	4.0 N
Press-fit force (static):	60 N	Max allowable screw depth into flange:	2.5 mm
Maximum radial play (5mm from mounting face):	≤0.02 mm	Axial play:	Preset
Maximum winding temperature:	125°C	Ambient temperature range:	-40 to 65°C
Standard rear shaft diameter:	3 mm	Standard rear shaft length "L":	0/3.7/5.5 mm

Connection (AWG 24#)		Total Length: L <sub>T</sub> =L <sub>1</sub> +L <sub>2</sub> +L <sub>3</sub>				
Cable 1: Yellow	Winding A	L1:19GP	L1:24GP	L2:BL22	L3:EN16S	L3:EN16T
Cable 2: Red	Winding B	18.8	24.0	32.0	10.7	12.0
Cable 3: Blue	Winding C	23.6	34.3			
Plug definition (AWG 28#) Molex: 51021-0500		28.4	42.8			
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					

**AM-BL2248BF Combination Scheme**

**Recommended Gearbox:**  
Planetary Gearbox:  
AM-19GP  
AM-22GP  
AM-24GP

**Recommended Encoder:**  
Encoder S: AM-EN1611S\*\*\*  
Encoder T: AM-EN1612T\*\*\*

For more combination specs, visit Assun Motor website.

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>

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