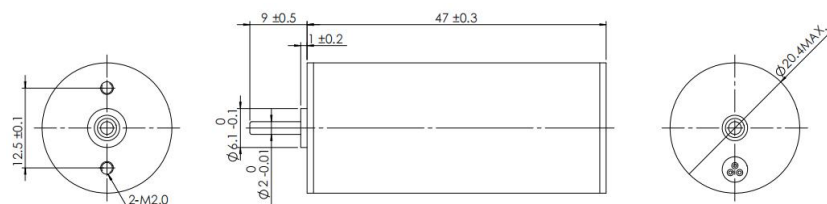


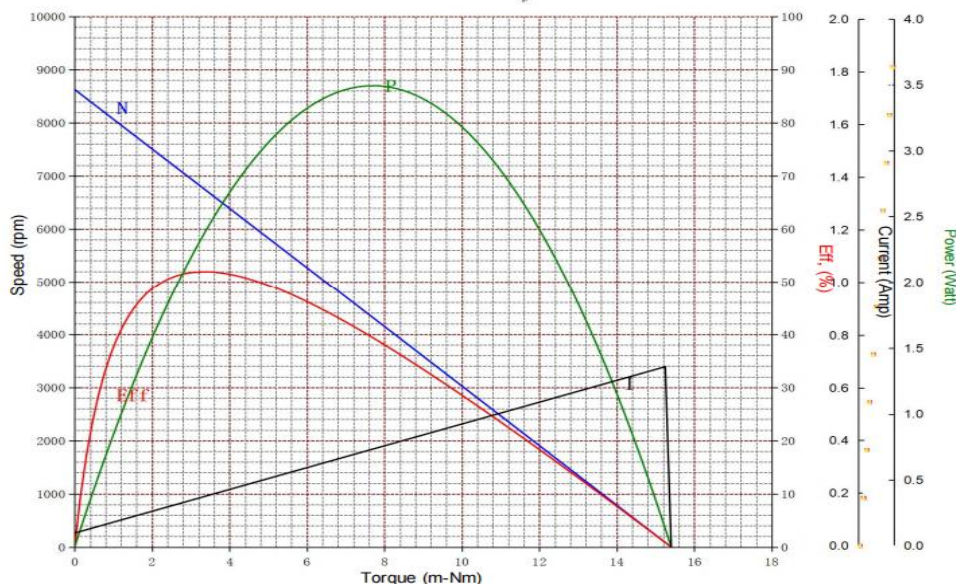
# BDMT Series - Brushless Inner Motor



## BDMT2047BL Performance Parameter

Motor Model	Voltage	No-load		At Maximum Efficiency						Stall		
		Current	Speed	Current	Speed	Torque		Output	Efficiency	Torque		Current
	V	A	r/min	A	r/min	g.cm	mN.m	W	%	g.cm	mN.m	A
BDMT2047BL-01	12.0	0.24	3100	1.33	2600	380.0	37.28	10.13	68.5	2353	230.8	6.38
BDMT2047BL-02	18.0	0.22	6400	1.18	5400	270.0	26.49	14.98	70.5	1743	170.9	6.42
BDMT2047BL-03	24.0	0.35	8600	1.52	7250	370.0	36.30	27.53	75.3	2365	232.0	7.84
Weight	220g(Approx.)			Output Power		1W~50W			Lifetime	>10000 Hours		

## Motor Performance Curve



VOLTAGE: 24.0 VDC	
<b>AT No Load</b>	
Speed :	8628 Rpm
Current:	0.053 Amp
<b>At stall (Extrapolated)</b>	
Torque :	15.404 m-Nm
Current:	0.684 Amp
<b>At maximum efficiency</b>	
Efficiency :	51.93 %
Torque :	3.345 m-Nm
Speed :	6754 Rpm
Current :	0.190 Amp
Output :	2.366 Watts
<b>At maximum power</b>	
Torque :	7.702 m-Nm
Speed :	4314 Rpm
Current :	0.368 Amp
Output :	3.479 Watts
<b>Characteristics</b>	
Torque Constant :	24.388 m-Nm/Amp
E.M.F Constant :	24.388 mV/rad/sec
Dy. Resistance :	35.073 Ohms
Motor Regulation:	560.094 Rpm/m-Nm
<b>Calculation</b>	
At Torque Level: 2.943 m-Nm	
Speed :	6979 Rpm
Current :	0.173 Amp
Efficiency :	51.70 %
Output :	2.151 Watts

## Application Fields

Medical devices: centrifuges, oxygen concentrators, rehabilitation and massage equipment, respiratory equipment, infusion pumps, diaphragm pumps, etc.;

Home Application: coffee machines, food processors, water dispensers, blenders, robot vacuums, smart toilets, beauty devices, etc.;

Smart devices: automated equipment, robots, etc.;