

# BLDC MOTOR

**Designed and Manufactured in India**

We have capacity to manufacture Brushless DC Motors of size 10 mm Diameter to 100 mm Diameter.



## Brushless DC Motors for RC Application

These motors are built using high power Rare earth Magnets, high precision bearings and precision machined components. These are available with different KV's in each model.

RC motors can be used for following applications

- RC Cars
- UAV
- Drones
- RC BOAT

### 12mm Brushless Motor Specification

(Lead Rear Exit)	Kv	<u>Io@8V</u>	Rm	P In*	I	Max I**	Max V	Dimensions (Dia. X Length)	Shaft Dia	Weight
MR-012-030-4000	4000RPM/V	0.30A	0.30A $\Omega$	44W	5A	6A	15V	12 x 30mm	2mm	15g
MR-012-030-5300	5300RPM/ V	0.43A	0.43A $\Omega$	44W	6A	7A	12V	12 x 30mm	2mm	15g

12mm motor is also available in 3200Kv, 6300Kv, 7300Kv, 8400Kv and 11000Kv

\*Based on adequate air flow around motor, i.e., open air stream behind propeller

\*\*Max I can be present for 30 seconds

All Afterburner motors are rated for 60,000 RPM operation and use ABEC 5 bearings

For the best efficiency, your ESC should be setup with 8° to 15° advance, and a switching rate of 10 to 20kHz. The above motors have 4 poles.

### 28mm Brushless Motor Specification

(Lead Rear Exit)	Kv	<u>Io@8V</u>	Rm	P In*	I	Max I**	Max V	Dimensions (Dia. X Length)	Shaft Dia	Weight
MR-028-056-2800V2	2800RPM/ V	2.50A	0.007 $\Omega$	500W	57A	69A	21V	28 x 56mm	3.17mm	160g
MR-028-056-1900V2	1900RPM/ V	1.30A	0.016 $\Omega$	500W	44A	52A	32V	28 x 56mm	3.17mm	160g
MR-028-056-1400V2	1400RPM/ V	0.90A	0.025 $\Omega$	500W	36A	43A	43V	28 x 56mm	3.17mm	160g
MR-028-056-0900V2	900RPM/V	0.45A	0.053 $\Omega$	500W	26A	31A	65V	28 x 56mm	3.17mm	160g

(Lead Rear Exit)	Kv	<u>Io@8V</u>	Rm	P In*	I	Max I**	Max V	Dimensions (Dia. X Length)	Shaft Dia	Weight
MR-028-040-3400V2	3400RPM/V	2.00A	0.01 $\Omega$	350W	42A	50A	18V	28 x 40mm	3.17mm	100g
MR-028-040-2500V2	2500RPM/V	1.20A	0.016 $\Omega$	350W	37A	45A	24V	28 x 40mm	3.17mm	100g
MR-028-040-2200V2	2200RPM/V	1.00A	0.021 $\Omega$	350W	33A	40A	27V	28 x 40mm	3.17mm	100g
MR-028-040-1700V2	1700RPM/V	0.65A	0.036 $\Omega$	350W	27A	32A	35V	28 x 40mm	3.17mm	100g
MR-028-040-1200V2	1200RPM/V	0.50A	0.066 $\Omega$	350W	20A	24A	50V	28 x 40mm	3.17mm	100g
MR-028-040-1000V2	1000RPM/V	0.30A	0.101 $\Omega$	350W	17A	20A	20A	28 x 40mm	3.17mm	100g

(Lead Rear Exit)	Kv	<u>Io@8V</u>	Rm	P In*	I	Max I**	Max V	Dimensions (Dia. X Length)	Shaft Dia	Weight
MR-028-032-4200V2	4200RPM/ V	1.80A	0.013 $\Omega$	275W	33A	40A	14V	28 x 32mm	3.17mm	70g
MR-028-032-3400V2	3400RPM/ V	1.30A	0.02 $\Omega$	275W	29A	35A	18V	28 x 32mm	3.17mm	70g
MR-028-032-2800V2	2800RPM/ V	1.00A	0.027 $\Omega$	275W	27A	32A	21V	28 x 32mm	3.17mm	70g
MR-028-032-2400V2	2400RPM/ V	0.75A	0.036 $\Omega$	275W	24A	29A	25V	28 x 32mm	3.17mm	70g
MR-028-032-1900V2	1900RPM/ V	0.50A	0.058 $\Omega$	275W	20A	23A	32V	28 x 32mm	3.17mm	70g
MR-028-032-1500V2	1500RPM/ V	0.40A	0.082 $\Omega$	275W	17A	20A	40V	28 x 32mm	3.17mm	70g

(Lead Rear Exit)	Kv	<u>Io@8V</u>	Rm	P In*	I	Max I**	Max V	Dimensions (Dia. X Length)	Shaft Dia	Weight
MR-028-056-2800V2SE	2800RPM/V	2.50A	0.007 $\Omega$	500W	57A	69A	21V	28 x 56mm	3.17mm	160g
MR-028-056-1900V2SE	1900RPM/V	1.30A	0.016 $\Omega$	500W	44A	52A	32V	28 x 56mm	3.17mm	160g
MR-028-056-1400V2SE	1400RPM/V	0.90A	0.025 $\Omega$	500W	36A	43A	43V	28 x 56mm	3.17mm	160g
MR-028-056-0900V2SE	900RPM/V	0.45A	0.053 $\Omega$	500W	26A	31A	65V	28 x 56mm	3.17mm	160g

(Lead Rear Exit)	Kv	<u>Io@8V</u>	Rm	P In*	I	Max I**	Max V	Dimensions (Dia. X Length)	Shaft Dia	Weight
MR-028-040-3400V2SE	3400RPM/V	2.00A	0.01 Ω	350W	42A	50A	18V	28 x 40mm	3.17mm	100g
MR-028-040-2500V2SE	2500RPM/V	1.20A	0.016 Ω	350W	37A	45A	24V	28 x 40mm	3.17mm	100g
MR-028-040-2200V2SE	2200RPM/V	1.00A	0.021 Ω	350W	33A	40A	27V	28 x 40mm	3.17mm	100g
MR-028-040-1700V2SE	1700RPM/V	0.65A	0.036 Ω	350W	27A	32A	35V	28 x 40mm	3.17mm	100g
MR-028-040-1200V2SE	1200RPM/V	0.50A	0.066 Ω	350W	20A	24A	50V	28 x 40mm	3.17mm	100g
MR-028-040-1000V2SE	1000RPM/V	0.30A	0.101 Ω	350W	17A	20A	60V	28 x 40mm	3.17mm	100g

(Lead Rear Exit)	Kv	<u>Io@8V</u>	Rm	P In*	I	Max I**	Max V	Dimensions (Dia. X Length)	Shaft Dia	Weight
MR-028-032-4200V2SE	4200RPM/ V	1.80A	0.013 Ω	275W	33A	40A	14V	28 x 32mm	3.17mm	70g
MR-028-032-3400V2SE	3400RPM/ V	1.30A	0.02 Ω	275W	29A	35A	18V	28 x 32mm	3.17mm	70g
MR-028-032-2800V2SE	2800RPM/ V	1.00A	0.027 Ω	275W	27A	32A	21V	28 x 32mm	3.17mm	70g
MR-028-032-2400V2SE	2400RPM/ V	0.75A	0.036 Ω	275W	24A	29A	25V	28 x 32mm	3.17mm	70g
MR-028-032-1900V2SE	1900RPM/ V	0.50A	0.058 Ω	275W	20A	23A	32V	28 x 32mm	3.17mm	70g
MR-028-032-1500V2SE	1500RPM/ V	0.40A	0.082 Ω	275W	17A	20A	40V	28 x 32mm	3.17mm	70g
MR-028-032-1200V2SE	1200RPM/ V	0.25A	0.137 Ω	275W	13A	16A	50V	28 x 32mm	3.17mm	70g

## 36mm Brushless Motor Specification

Model (Lead Rear Exit)	Kv	Io@8V	Rm	P In*	I	Max I**	Max V	Shaft Dia	Weight
MR-036-050-5900V2-3F	5900RPM/V	2.60A	0.004Ω	700W	95A	115A	10V	3.17mm	230g
MR-036-050-4800V2-3F	4800RPM/V	2.40A	0.004 Ω	700W	97A	117A	13V	3.17mm	230g
MR-036-050-3300V2-3F	3300RPM/V	1.35A	0.007Ω	700W	75A	90A	18V	3.17mm	230g
MR-036-050-2200V2-3F	2200RPM/V	1.40A	0.007 Ω	700W	75A	90A	27V	3.17mm	230g
<u>MR-036-050-1600V2-3F</u>	1600RPM/V	0.90A	0.012 Ω	700W	57A	68A	38V	3.17mm	230g
MR-036-050-1300V2-3F	1300RPM/V	0.65A	0.019 Ω	700W	48A	58A	46V	3.17mm	230g
MR-036-050-5900V2-5	5900RPM/V	2.60A	0.004 Ω	700W	95A	115A	10V	5mm	230g
MR-036-050-4800V2-5	4800RPM/V	2.40A	0.004 Ω	700W	97A	117A	13V	5mm	230g
MR-036-050-3300V2-5	3300RPM/V	1.35A	0.007 Ω	700W	75A	90A	18V	5mm	230g
MR-036-050-2200V2-5	2200RPM/V	1.40A	0.007 Ω	700W	75A	90A	27V	5mm	230g
MR-036-050-1600V2-5	1600RPM/V	0.90A	0.012 Ω	700W	57A	68A	38V	5mm	230g
MR-036-050-1300V2-5	1300RPM/V	0.65A	0.019 Ω	700W	48A	58A	46V	5mm	230g
MR-036-050-1000V2-5	1000RPM/V	0.80A	0.019 Ω	700W	48A	57A	60V	5mm	230g
<u>MR-036-050-0810V2-5</u>	810RPM/V	0.65A	0.028 Ω	700W	40A	47A	74V	5mm	230g
MR-036-050-0610V2-5	610RPM/V	0.50A	0.049 Ω	700W	30A	36A	98V	5mm	230g

Model (Lead Rear Exit)	Kv	Io@8V	Rm	P In*	I	Max I**	Max V	Shaft Dia	Weight
MR-036-060-3100V2-5	3100RPM/V	2.70A	0.004 Ω	920W	103A	124A	19V	5mm	290g
MR-036-060-2200V2-5	2200RPM/V	2.80A	0.004 Ω	920W	102A	123A	27V	5mm	290g
MR-036-060-2000V2-5	2000RPM/V	1.70A	0.006 Ω	920W	87A	105A	30V	5mm	290g
MR-036-060-1800V2-5	1800RPM/V	2.30A	0.006 Ω	920W	82A	99A	33V	5mm	290g
MR-036-060-1600V2-5	1600RPM/V	1.30A	0.008 Ω	920W	78A	93A	35V	5mm	290g
MR-036-060-1500V2-5	1500RPM/V	1.40A	0.008 Ω	920W	77A	93A	40V	5mm	290g
MR-036-060-1300V2-5	1300RPM/V	1.10A	0.011 Ω	920W	67A	80A	46V	5mm	290g
MR-036-060-1100V2-5	1100RPM/V	0.90A	0.015 Ω	920W	58A	70A	55V	5mm	290g

MR-036-060-1000V2-5	1000RPM/V	0.80A	0.017 $\Omega$	920W	55A	66A	60V	5mm	290g
MR-036-060-0850V2-5	850RPM/V	0.85A	0.017 $\Omega$	920W	55A	66A	72V	5mm	290g
MR-036-060-0780V2-5	780RPM/V	0.75A	0.024 $\Omega$	920W	46A	56A	80V	5mm	290g
MR-036-060-0650V2-5	650RPM/V	0.60A	0.039 $\Omega$	920W	37A	44A	96V	5mm	290g
MR-036-060-0500V2-5	500RPM/V	0.45A	0.058 $\Omega$	920W	30A	36A	98V	5mm	290g
MR-036-060-0420V2-5	420RPM/V	0.40A	0.091 $\Omega$	920W	24A	29A	98V	5mm	290g

Model (Lead Side Exit)	Kv	Io@8V	Rm	P In*	I	Max I**	Max V	Shaft Dia	Weight
MR-036-050-5900V2SE-3F	5900RPM/V	2.60A	0.004 $\Omega$	700W	95A	115A	10V	3.17mm	230g
MR-036-050-4800V2SE-3F	4800RPM/V	2.40A	0.004 $\Omega$	700W	97A	117A	13V	3.17mm	230g
MR-036-050-3300V2SE-3F	3300RPM/V	1.35A	0.007 $\Omega$	700W	75A	90A	18V	3.17mm	230g
MR-036-050-2200V2SE-3F	2200RPM/V	1.40A	0.007 $\Omega$	700W	75A	90A	27V	3.17mm	230g
MR-036-050-1600V2SE-3F	1600RPM/V	0.90A	0.012 $\Omega$	700W	57A	68A	38V	3.17mm	230g
MR-036-050-1300V2SE-3F	1300RPM/V	0.65A	0.019 $\Omega$	700W	48A	58A	46V	3.17mm	230g
MR-036-050-5900V2SE-5	5900RPM/V	2.60A	0.004 $\Omega$	700W	95A	115A	10V	5mm	230g
MR-036-050-4800V2SE-5	4800RPM/V	2.40A	0.004 $\Omega$	700W	97A	117A	13V	5mm	230g
MR-036-050-3300V2SE-5	3300RPM/V	1.35A	0.007 $\Omega$	700W	75A	90A	18V	5mm	230g
MR-036-050-2200V2SE-5	2200RPM/V	1.40A	0.007 $\Omega$	700W	75A	90A	27V	5mm	230g
MR-036-050-1600V2SE-5	1600RPM/V	0.90A	0.012 $\Omega$	700W	57A	68A	38V	5mm	230g
MR-036-050-1300V2SE-5	1300RPM/V	0.65A	0.019 $\Omega$	700W	48A	58A	46V	5mm	230g
MR-036-050-1000V2SE-5	1000RPM/V	0.80A	0.019 $\Omega$	700W	48A	57A	60V	5mm	230g
MR-036-050-0810V2SE-5	810RPM/V	0.65A	0.028 $\Omega$	700W	40A	47A	74V	5mm	230g
MR-036-050-0610V2SE-5	610RPM/V	0.50A	0.049 $\Omega$	700W	30A	36A	98V	5mm	230g

Model (Lead Side Exit)	Kv	Io@8V	Rm	P In*	I	Max I**	Max V	Shaft Dia	Weight
MR-036-060-3100V2SE-5	3100RPM/V	2.70A	0.004 $\Omega$	920W	103A	124A	19V	5mm	290g
MR-036-060-2200V2SE-5	2200RPM/V	2.80A	0.004 $\Omega$	920W	102A	123A	27V	5mm	290g

MR-036-060-2000V2SE-5	2000RPM/V	1.70A	0.006 $\Omega$	920W	87A	105A	30V	5mm	290g
MR-036-060-1800V2SE-5	1800RPM/V	2.30A	0.006 $\Omega$	920W	82A	99A	33V	5mm	290g
MR-036-060-1600V2SE-5	1600RPM/V	1.30A	0.008 $\Omega$	920W	78A	93A	35V	5mm	290g
MR-036-060-1500V2SE-5	1500RPM/V	1.40A	0.008 $\Omega$	920W	77A	93A	40V	5mm	290g
MR-036-060-1300V2SE-5	1300RPM/V	1.10A	0.011 $\Omega$	920W	67A	80A	46V	5mm	290g
MR-036-060-1100V2SE-5	1100RPM/V	0.90A	0.015 $\Omega$	920W	58A	70A	55V	5mm	290g
MR-036-060-1000V2SE-5	1000RPM/V	0.80A	0.017 $\Omega$	920W	55A	66A	60V	5mm	290g
MR-036-060-0850V2SE-5	850RPM/V	0.85A	0.017 $\Omega$	920W	55A	66A	72V	5mm	290g
MR-036-060-0780V2SE-5	780RPM/V	0.75A	0.024 $\Omega$	920W	46A	56A	80V	5mm	290g
MR-036-060-0650V2SE-5	650RPM/V	0.60A	0.039 $\Omega$	920W	37A	44A	96V	5mm	290g
MR-036-060-0500V2SE-5	500RPM/V	0.45A	0.058 $\Omega$	920W	30A	36A	98V	5mm	290g
MR-036-060-0420V2SE-5	420RPM/V	0.40A	0.091 $\Omega$	920W	24A	29A	98V	5mm	290g

Model (Lead Side Exit)	Kv	Io@8V	Rm	P In*	I	Max I**	Max V	Shaft Dia	Weight
MR-036-070-2300V2SE-5	2300RPM/V	2.20A	0.005 $\Omega$	1100W	98A	118A	26V	5mm	340g
MR-036-070-2000V2SE-5	2000RPM/V	2.60A	0.005 $\Omega$	1100W	96A	115A	30V	5mm	340g
MR-036-070-1600V2SE-5	1600RPM/V	1.80A	0.007 $\Omega$	1100W	85A	102A	38V	5mm	340g
MR-036-070-1200V2SE-5	1200RPM/V	1.30A	0.010 $\Omega$	1100W	73A	88A	50V	5mm	340g
MR-036-070-1000V2SE-5	1000RPM/V	1.00A	0.014 $\Omega$	1100W	63A	76A	60V	5mm	340g
MR-036-070-0880V2SE-5	880RPM/V	0.85A	0.017 $\Omega$	1100W	58A	69A	68V	5mm	340g
MR-036-070-0750V2SE-5	750RPM/V	1.00A	0.017 $\Omega$	1100W	57A	69A	80V	5mm	340g
MR-036-070-0600V2SE-5	600RPM/V	0.70A	0.027 $\Omega$	1100W	46A	55A	100V	5mm	340g
MR-036-070-0500V2SE-5	500RPM/V	0.50A	0.037 $\Omega$	1100W	40A	48A	120V	5mm	340g
MR-036-070-0380V2SE-5	380RPM/V	0.40A	0.070 $\Omega$	1100W	29A	35A	158V	5mm	340g

Model (Lead Side Exit)	Kv	Io@8V	Rm	P In*	I	Max I**	Max V	Shaft Dia	Weight
MR-036-080-2200V2SE-5	2200RPM/V	1.90A	0.006 $\Omega$	1300W	98A	117A	27V	5mm	400g
MR-036-080-2000V2SE-5	2000RPM/V	1.90A	0.006 $\Omega$	1300W	98A	117A	30V	5mm	400g
MR-036-080-1600V2SE-5	1600RPM/V	2.10A	0.006 $\Omega$	1300W	97A	116A	38V	5mm	400g
MR-036-080-1100V2SE-5	1100RPM/V	1.10A	0.011 $\Omega$	1300W	75A	90A	55V	5mm	400g

\*Based on adequate air flow around motor, i.e., open air stream behind propeller

\*\*Max I can be present for 30 seconds

All Afterburner motors are rated for 60,000 RPM operation and use ABEC 5 bearings

For the best efficiency, your ESC should be setup with 8° to 15° advance, and a switching rate of 10 to 20kHz.  
The above motors have 4 poles.



# About us

MoveMatic, founded in 2019 with a goal to design and develop Indigenous electric motors both standard and custom built motors and allied products to support wide range of industrial application.

We take pride in delivering world class services and our customers are well aware of the fact that we do not just deliver products; we deliver a satisfying experience which has enabled us to forge strong relationships with our customers. We also consult and design custom motors for our customers to match their applications.

## Our Product

- Permanent Magnet DC servo motors
- Frameless Direct drive Torque motors
- Brushless Servo Motor
- Printed Armature DC Servo Motors.
- Induction Motors for Warships and Submarines. (Shock grade)
- Motors for Defence Application.



**Innovation**



**Design**



**Customization**



**Production**



**MOVEMATIC**

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