

Motors shown on this list are additional to those detailed on the original (word only) list dated 12th. July 2007.

Whilst sample Motors submitted have been found to conform with IFMAR rules for Modified Brushless Motors, it is the responsibility of ALL competitors to ensure that the versions they use also comply with all IFMAR rules and requirements.

**NOTE: Only Rotors listed (below) can be used at IFMAR WC events. They may differ from Rotors listed by other organisations.**

*DISCLAIMER: "IFMAR shall not be liable for special, indirect or consequential damages, loss of profits, production or commercial loss in any way connected with the approved products on this list. As IFMAR has no control over use, set-up, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, set-up or assembly the user accepts all resulting liability".*






**IFMAR PRODUCTS LIST -- 1:10 BRUSHLESS MODIFIED MOTORS. Issued: 01 Feb. 2026.**

**NOTE: All Rotors (including Option Rotors) used in Motors added from 2021 onwards, MUST have the Rotor unique Part # on the external part of the shaft.**

NOTES: Motors approved by IFMAR must comply with IFMAR Motor rules. The following to aid Tech. Officers:-  
 Rule 5 details the years when the continually changing requirement for stator access was implemented. From 2015: Rule 6.4 (e). Rotors must be identified with manufacturers name/logo and Part Number and from 2021 Rotors must have the 'listed' Part Number etched/stamped on the external area of the rotor shaft. From 2022: Rule 6.3 - No solid glue or filler can be added to the wires of the final winding assembly.  
 Motors from previous years without these features retain approval.

Manufacturer Type/Range	Illustration only	Notes
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**2026 IFMAR PRODUCTS LIST -- BRUSHLESS MODIFIED MOTORS. Issued: 01 Feb. 2026.**







Surpass Hobby Rocket RC V6S-M All winds			End Caps remove but also two cut-outs for measuring. Adjustable timing 0/+60 deg. Wind & V6M printed on stator. All screws magnetic. Al. retaining housing, steel shielded magnetic bearings. Rotor with Surpass, Part # on shaft:- C52121 in 3.5T-5.0T. C52123 in 5.5T-10.5T. Both rotors allowed as Options.
United Sino Enterprises ORCA Modtreme4 M4 All 1/2 Turn winds.			Sensored system. Stator open with End-Caps. Wind & M4 printed on stator. Adj. timing 5/60. Long screws non-magnetic, timing screws magnetic. Al. retaining housing, steel shielded magnetic bearings. Rotor with ORCA & Part # RT25LM12133 on shaft. Option rotor: RT26M123241.
United Sino Enterprises ORCA Modtreme4 M4 All 'zero' Turn winds.			

**2025 IFMAR PRODUCTS LIST -- BRUSHLESS MODIFIED MOTORS. Issued: 24 June 2025.**





Shenzhen Cayote Crest Modi All 1/2 Turn winds			Must have inline 'cut-outs' in stator End-caps for stator measure & all laminates to be viewed. Sensored system. Stator open. Pinion Cap removes but not terminal ring. Wind on stator. Adjustable timing +20/+50 deg. All screws magnetic, Al. retaining housing, steel shielded magnetic bearings. Rotor with name, Part # on shaft: 3.5T & 4.0T CYEBR1001, 4.5T & 5.0T CYEBR1002, 5.5T - 9.5T CYEBR1003. All optional.
Shenzhen Cayote Crest Modi All 'zero' Turn winds			
Team Powers Actinium V5M All Winds			

<p>Team Exalt Phoenix All ½ Turn winds</p>			<p>Sensored system. Black end-plate has Exalt &amp; Phoenix printed. Wind on stator. Adjustable timing 0-60 deg. All screws magnetic, Al. retaining housing, steel shielded magnetic bearings.</p> <p>Rotor with name, Part # on shaft:- EXAM2402. Option rotorS: EXAM2403, EXAM2404, EXAM2405.</p>
<p>Team Exalt Phoenix All 'zero' Turn winds</p>			
<p>Ruddog RP543 All ½ Turn winds.</p>			<p>Sensored system. 4 side screws retain End-Cap. Timing insert with Ruddog. Adjustable timing 0/+60. Wind &amp; RP543 on stator visible. Collector ring 4mm on 1/2 winds, 0.8mm on zero winds. All screws magnetic, Al. sensor housing, magnetic steel shielded bearings. Stator bonded.</p> <p>Rotor with name, Part # on shaft: 3.5T - 5.5T RP-0808, 6.0T - 8.5T RP-0434. Either Optional. Also Option rotor: RP-0498.</p>
<p>Ruddog RP543 All 'zero' Turn winds.</p>			
<p>Reds Racing VX GEN4 MR Design All winds. Only Part #'s ending 'H' approved</p>			<p>Must have cut-outs in End-caps for stator measure. Sensored system. "Y" Wind. Red Al. timing plate. Adjustable timing 0-50. All screws magnetic, Al. sensor housing &amp; retaining plate, magnetic steel shielded bearings.</p> <p>Rotor with name &amp; Part # on shaft MSTE 0019. Option rotor: MSTE0036</p>

**2024 IFMAR PRODUCTS LIST -- BRUSHLESS MODIFIED MOTORS. Issued: 19 July 2024.**

<p>Muchmore Fleta ZX V3 All winds. (Does not include 6.5T MR-V3ZX065R)</p>			<p>Sensored system. Stator open, Caps remove. Adjustable timing 0/+50 deg. All screws magnetic, Al. retaining housing, steel shielded magnetic bearings. MUST have slots in both End-Caps for stator measuring.</p> <p>Rotor with: Muchmore, Part # on shaft:- 3.5T-5.0T MR-FZRST, 5.5T-9.5T MR-FZR01. Either rotor allowed in all winds. Option rotor: MR-FZRSTTI</p>
<p>United Sino Enterprises ORCA Modtreme3 All ½ Turn winds.</p>			<p>Sensored system. Stator bonded, but has access holes. Wind printed on stator. Adj. timing 5/60. All screws magnetic, Al. retaining housing, steel shielded magnetic bearings.</p> <p>Rotor with: ORCA &amp; Part # M-TZ-50121 on shaft. Option rotors: RT23OM12335, RT20MM12324 on shaft.</p>
<p>United Sino Enterprises ORCA Modtreme3 All 'zero' Turn winds.</p>			

**2023 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 14 July 2023.**




















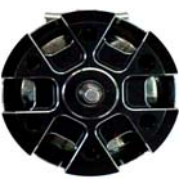

<p>Hoomark Zombie EVO II All winds</p>			<p>Sensored system. Stator open, Caps remove. Adjustable timing 0/+60 deg. Body screws non-magnetic, timing screws magnetic, Al. retaining housing, steel shielded magnetic bearings. Rotor with: Zombie on magnet.</p> <p>Rotor with: Name &amp; Part # M-TZ-50121 on shaft. Option rotors:- M-TZ-50125, M-TZ-50123, M-TZ-725125</p>
<p>Ruddog RP542 All winds</p>			<p>Sensored system. 4 side screws retain End-Cap. Timing insert with Ruddog. Adjustable timing 0/+60. Wind &amp; RP542 on stator visible. 3mm collector ring. All screws magnetic, Al. sensor housing, magnetic steel shielded bearings. Stator bonded.</p> <p>Rotor with: Name &amp; Part #:- RP-0434 on shaft. Option rotors: RP-0498, RP-0808.</p>

Team Powers Actinium V5.0			Sensored system. Black Al. one piece Can. 4 full length slots. Team Powers on End-Cap. Wind on stator. Adjustable timing 0-60. All 6 c/sk screws magnetic, Al. sensor housing, steel shielded bearings. Rotor with: Name & Part # TP123G-S35 on shaft. Option rotor: TP121G-S2
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**2022 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 01 June 2022.**

No new Motors added to the Homologation List for 2021 & 2022. All events were cancelled.  
Only Optional Rotors added to a 2019 Homologated Motor.

**2020 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 03 April 2020.**

ASSOCIATED REEDY Sonic. M4			 <p>M4 - Winds 3.5T &amp; 4.0T:- Laminates 0.35mm. Rotor in Sample :- # 27450 12.0 x 5mm.</p> <p>M4 - Winds 4.5T to 9.5T:- Laminates 0.30mm. Rotor in sample:- #27448 12.5 x 5mm.</p> <p>Optional rotors all winds :- Either of above plus:- # 27447 12.5 x 7.2mm. # 27449 13.0 x 5.0mm. # 27460 12.3 x 5.0mm.</p>
ASSOCIATED REEDY Sonic. M4 6.5T - 1S Pt. # 27443 Twin lines around wind #			 <p>M4 - Wind 6.5T 27443:- Laminates 0.30mm. Rotor in Sample :- # 27460 12.3 x 5mm. Optional rotors :- # 27447 12.5 x 7.2mm. # 27448 12.5 x 5.0mm. # 27449 13.0 x 5.0mm. # 27450 12.0 x 5.0mm.</p>
FREEMAX TECHNOLOGY Arrowmax Dash R-Tune V3			 <p>Rotor in Samples :- DA-730010. 12.3 x 5.0 mm Optional :- DA-730009. 12.15 x 5.0 mm</p>
REDS RACING VX3			 <p>Rotor in Samples :- MSTE 0019. 12.5 x 5.0 mm Optional :- None submitted</p>
SURPASS HOBBY ROCKET-RC			 <p>Rotor in Samples :- C52123. 12.3 x 5.0 mm Optional :- C53125. 12.5 x 5.0 mm</p>
TEKIN Redline G4			 <p>Rotor in Samples :- TT 2777. 12.4 x 5.2 mm Optional :- None submitted</p>
YOKOMO Racing Performer M4 Series			 <p>Rotor in samples:- RP-056 12.5 x 5mm Options:- RP-057 12.5 x 7.2 mm RP-058 12.3 x 5mm RP-059 12.3 x 7.2mm RP-060 12.2 x 5mm RP-061 12.2 x 7.2mm RP-062 13.0 x 5mm RP-063 13.0 x 7.2mm RP-064 12.0 x 5mm RP-065 12.0 x 7.2mm</p>

**2019 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 09 Sept. 2019.**

<p>FREEMAX TECHNOLOGY Arrowmax Dash R-Tune V2</p>				<p>Rotor in samples:- DA730010 Black Ring Optionals:- None submitted</p>
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**2019 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 30 April 2019.**

<p>MACLAN MRR V2m</p>				<p>Rotor in samples:- MCL4174 Purple Ring Optionals:- MCL4187 Black Ring</p>
<p>MUCHMORE Fleta ZX V2</p>				<p>Rotor in samples:- MR-FZR01 Al. s/c Ring Optionals:- MR-FZR03 Gold Ring MR-FZR07 Dk. Grey Ring</p>
<p>RC CONCEPT ECR 10</p>				<p>Rotor in samples:- 50125 Black Ring Optionals:- None submitted</p>
<p>UNITED SINO ENTERPRISES ORCA Modtreme</p>				<p>Rotor in samples:- RT18M121245. Shaft M121. Optional rotors:- Submitted 2022 ORR323M3. Shaft M3. RT20M123245. Shaft M123. RT20MM12324. Shaft MM123.</p>

**2018 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 01 May 2018.**

<p>TRINITY Monster Horsepower</p>				<p>Rotor in samples:- TEP1153 Green Ring Optionals:- TEP1151 Blue Ring TEP1152 Red Ring TEP1154 Black Ring</p>
<p>3.5T - 5.0T Open End-Caps  HOBBYWING Xerun V10 G3  5.5T - 8.5T Closed End-Caps</p>	 	 	 	<p>Timing Adj.: 20-50 deg.  Rotor in samples:- 3.5T :- <u>Shaft Code:</u> 30820019 5-12.1-A 4.5T &amp; 5.0T :- 30820017 5-12.3-B 5.5T - 8.5T :- 30820020 5-12.5-A Optionals:- Any above, plus 30820401 5-12.5-T-B 30820402 5-12.3-T-B 30820418 1-BESB</p>
<p>ARROWMAX DASH R-Tune</p>				<p>Rotor in Samples :- 4.5T: <u>Shaft Code:</u> DA730001 RL125 Other Winds: DA730002. RS125 Optionals :- DA730003 RSS125 DA730004 RSS123 DA730005 RS121 DA730006 RS123 DA730007 RL121</p>

**2017 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 25 May 2017**





PRT Elec. PRT AIRs Pro.				Rotor in Samples :- PRT 125HT. 12.5 x 5mm Optional :- PRT 12HT. 12.0 x 5mm
YOKOMO Racing Performer M3 Series				Rotor in samples:- RP-056 12.5 x 5mm Options:- RP-057 12.5 x 7.2 mm RP-058 12.3 x 5mm RP-059 12.3 x 7.2mm RP-060 12.2 x 5mm RP-061 12.2 x 7.2mm RP-062 13.0 x 5mm RP-063 13.0 x 7.2mm RP-064 12.0 x 5mm RP-065 12.0 x 7.2mm
MACLAN MRR				Rotor in Samples :- MCL 4077. 12.5 x 5mm Optional :- MCL 4078. 12.5 x 5mm MCL 4079. 13.0 x 5mm MCL 4075 12.5 x 7.2mm MCL 4076 12.5 x 7.2mm MCL 4093 12.5 x 7.2mm
LRP XTEC X22.				Rotor in samples:- 520502 12.5 x 5 mm Optional:- 520503 12.1 x 5mm 520504 12.3 x 5mm 520505 12.7 x 5mm 520506 13.0 x 5mm
LRP XTEC X22.				Optional End-Plate. Black - # 520500 Blue - # 520501
HOBBYWING Xerun V10 G2				14.11.16. Optional End-Cap Ass. Timing +30/+60. Part # 30820054

**2016 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 05 May 2016**

TIANCO ORCA RT				Rotor in Samples :- ORR323M3. 12.3 x 5 mm Options -update 30.12.16 ORR423M0. 12.0 x 5 mm ORR321M1. 12.0 x 5 mm ORR233ML. 12.3 x 5mm ORR238ML. 12.3 x 5mm ORR253ML. 12.5 x 5mm ORR258ML. 12.5 x 5mm
REEDY Sonic. M3				Two stator designs. Rotor in Samples :- # 274 12.3 x 5mm. # 275 12.5 x 5mm. Optional rotors :- # 276 13.0 x 5mm. Added 2017:- # 271 12.0 x 7.2mm. # 272 12.2 x 7.2mm. # 273 12.5 x 7.2mm. # 286 12.3 x 7.2mm. # 296 12.0 x 5mm.
ORION Vortex VST2 Pro. V2 LW (2016)				Rotor in Samples :- ORI41470. 12.1 x 4.7mm Optional :- ORI41472. 12.5 x 4.7mm ORI41473. 12.5 x 4.7mm

ORION Vortex VST2 Pro. V2 LW ULTRA (2016)				Rotor in Samples :- ORI41547. 12.1 x 4.7mm Optional :- ORI41548. 12.1 x 4.7mm
ORION Vortex VST2 Pro. V2 XLW (2016)				Rotor in Samples :- ORI41470. 12.1 x 4.7mm Optional :- ORI41472. 12.5 x 4.7mm ORI41473. 12.5 x 4.7mm
ORION Vortex VST2 Pro. V2 XLW ULTRA (2016)				Rotor in Samples :- ORI41547. 12.1 x 4.7mm Optional :- ORI41548. 12.1 x 4.7mm
TEKIN Redline Gen 3				Rotor in Samples :- Tek. 2723. 13.0 x 7.2 mm Tek. 2721. 12.5 x 7.2 mm Optional :- Tek. 2724 13.0 x 5 mm Tek. 2719 12.3 x 7.2 mm Tek. 2722 12.5 x 7.2 mm
HOBBYWING Xerun V10 G2				Rotor in Samples :- 30820002. 12.3 x 5 mm Optional :- 30820006. 12.5 x 5 mm 30820008. 13.0 x 5 mm 30820010. 12.3 x 5 mm 30820012. 12.1 x 5 mm 30820013. 12.5 x 5 mm

**2015 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 25 Aug. 2015**

YOKOMO Race Performer M2				Rotor in Samples :- RP-021. 12.5 x 5 mm Optional :- RP-022. 12.5 x 7.2 mm RP-023. 12.3 x 5 mm RP-024. 12.3 x 7.2 mm RP-025. 14.0 x 5 mm RP-026. 13.5 x 5 mm RP-027. 12.0 X 7.2 mm
SUNRAY TECHNOLOGY Trion TricoRoll MM				Rotor in Samples :- TB 1443. 12.5 x 5 mm Optional :- TB 1444. 12.75 x 5 mm MR-FZR06. 12.80 x 5 mm
SCORPION POWER RS-3420				Rotor in Samples :- 975. 12.5 x 4 mm Optional :- 976. 12.3 x 4 mm 977. 12.0 x 4 mm
VAMPIRE AB+ V2				20.07.14: Updated all aluminium timing & end-plate Ass. fitted.
MUCMORE FLETA ZX. Optional tuning part.				05.08.14. Aluminium timing-plate MR-FZAT fitted.




2014 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 20 June 2014

<p>TEAM POWERS Actinium</p>				<p>Rotor in Samples :- 12.5 x 5 mm.</p>
<p>TRINITY D3.5</p>				<p>Rotor in Samples :- 12.5 x 5 mm.</p>
<p>SKYRC Ares Pro.</p>				<p>Rotor in Samples :- 12.5 x 5 mm.</p>
<p>LIPOTECH XR Vario</p>				<p>Rotor in Samples :- 12.5 x 5 mm. 12.5 x 7.2 mm.</p>
<p>GFORCE Gforce Super Sonic</p>				<p>Rotor in Samples :- 12.5 x 5 mm.</p>
<p>ORION VST2 Pro. (2014)</p>				<p>Approved 2013, revised stator option.  Rotor in Samples :- 12.1 x 4.76 mm.</p>
<p>ORION VST2 Pro. Light-Weight (2014)</p>				<p>Optional :- 12.4 x 5 mm. 12.9 x 5 mm.  LW version has two stator options.</p>
<p>TIANCO ORCA RX3</p>				<p>Rotor in Samples :- 12.5 x 5 mm. 12.4 X 5 mm.</p>
<p>KING GOLDEN Speed Passion 4.0</p>				<p>Rotor in Samples :- 12.5 x 5 mm.</p>
<p>Optional Part Colours</p>				<p>Rotor in Samples :- 12.5 x 5 mm.</p>
























SPEED ENERGY SE Race Spec.				Rotor in Samples :- 12.5 x 5 mm. Optional :- 12.24 x 5 mm.
HACKER Skalar 10				Rotor in Samples :- 12.5 x 5 mm. Optional :- 12.24 x 5 mm. 13.0 x 5 mm.
HOBBYWING Xerun V10				Rotor in Samples :- 12.5 x 5 mm.
TIANCO ORCA TX Optional Tuning Parts.				Optional End-Plate. # OME111TX.  20.07.14 New sensor Ass. CAS-0220TX-30 fitted.

**2013 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 17 May 2013**

REEDY Sonic. MACH 2				Rotor in Samples :- # 958 12.50 mm. Optional rotors :- # 957 12.20 mm. # 987 13.00 mm.
TRICORE SAVOX X.1				Approved in 2011. Resubmitted with stator access. Optional rotors:- A35, A36, A37, A38.
VAMPIRE AB+ V2				Rotor in sample :- 12.50 mm dia. Gold finish. 21.10.13: Retaining Ring & Timing Plate modified.
TIANCO ORCA TX				Rotor in sample:- 125M-H 12.5 mm. Optional :- 125M-SH
TEKIN Redline Gen2				Rotor in Samples :- 13 x 5.2 mm. 13 x 7.2 mm.
ORION VST2 Pro.				Rotor in Samples :- 12.1 x 4.76 mm. Optional :- 12.5 x 7.1 mm.











YOKOMO 'M' Series				Rotor in Samples :- 12.5 x 5 mm.
MUCMORE FLETA ZX				Rotor in Samples :- 12.5 x 5 mm.

**2012 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 26 March 2012**

THUNDER POWER RC Z3R				<p>Later version has: 6mm slots</p> <p>Optional Rotors :- AMR-Z3RM Purple AMRS-Z3RM Gold AHT-Z3RS Green AST-Z3RS Blue ASR-Z3RS Red</p> <p>Early version has: 4mm slots</p>
				
LRP Vector X20.				<p>Optional Rotors :- 50632 12 mm 50633 12.5 mm 50634 13 mm 50635 12.45 mm 50636 12 mm 50637 12.5 mm (kit) 50638 13 mm 50639 12.25 mm (Also Nosram versions,with alternative Part #'s)</p>
NOSRAM Pure 2				
KING GOLDEN Speed passion 3.0 (Normal)				<p>Optional Rotors :- RM 13801 Blue. RM 13802 Purple. RM 13802NA Purple RM 13803 Red (Kit) RM 13803NA Red RM 13804 Gold RM 13805 Green RM 13806 Orange</p>
	7.5T & 8.5T no Vent Holes			
KING GOLDEN Speed passion 3.0 1 CELL.				NA = Silver Edition
KING GOLDEN Speed passion 3.0 MMM.				All above available with Stock shaft size using #RS

REEDY Sonic.				Rotor in sample :- 12.50 mm dia.
TIANCO ORCA RX2				Optional Rotors :- Red 12.5 mm dia.. Gold 12.8 mm dia.
DUALSKY Track & Field Z5				Rotor in sample :- 12.50 mm dia.

**2011 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 05 April 2011**





TRICORE SAVOX Z1				Rotor in sample :- 12.30 mm. dia.
ORION Vortex Race (2010 Ver.)				Rotor in sample :- 12.50 mm. dia.
KING GOLDEN Speed Passion 3.0			Alternative Rotors:- RM13802 12.3mm dia. RM13802NA 12.3mm " RM13803 12.5mm " RM13803NA 12.5mm " RM13804 12.8mm " RM13805 12.8mm " RM13806 13.0mm "  Motor can have stator ID of 14.8mm or 15.8mm	
				

**2010 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 23 March 2010**












LIPOTECH Lipotech XR				Alternative Rotors :- 12.30 mm. dia. 12.50 mm. " 13.00 mm. " 13.50 mm. "
GM RACING (Graupner) Brushless PRO 2010 Version				Motor also supplied with Black Finish. Alternative Rotors supplied:- 12.00 mm. dia. 12.50 mm. "
YOKOMO				Rotor in sample :- 13.50 mm. dia.

LRP Vector X12. Tuning parts.			Alternative Rotors :- 12.00 mm. dia. # 50636. 12.45 mm. " # 50637. 13.00 mm. " # 50634. 13.00 mm. " # 50638.
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**2009 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 09 June 2009**

ORION Vortex 2008 Race				
Novak Ballistic Brushless				

**2008 IFMAR PRODUCTS LIST -- BRUSHLESS MOTORS: Issued: 04 Nov. 2008**

APO Team Powers				
ORION Vortex 2008 Race				
LRP Vector X12				
GM RACING (Graupner) Brushless PRO				
TRINITY				Also with Black finish.
KING GOLDEN Speed Passion Competition 2.0				
KING GOLDEN Speed Passion Competition 2.0		