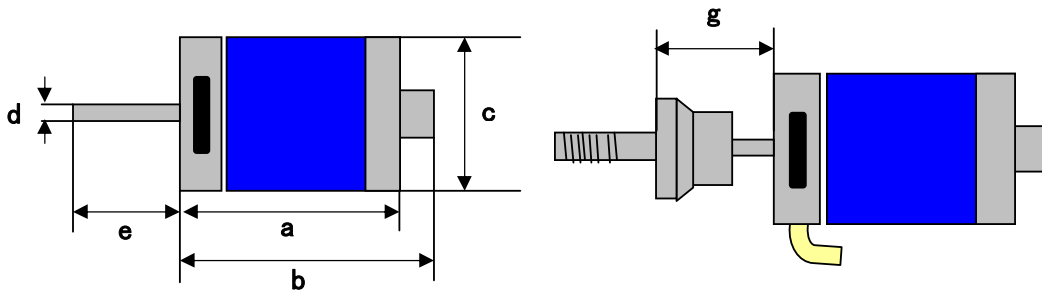


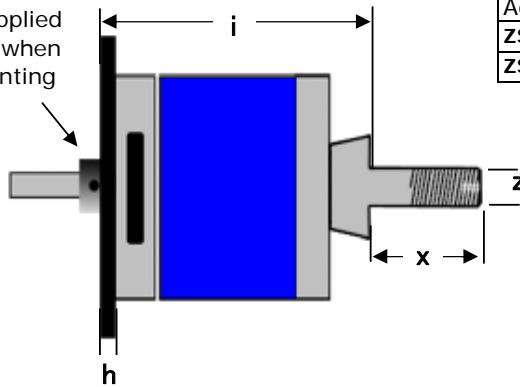
Zs 30 Series Motor Dimensions and Backmount Details



Zs30 Series Dimensions - Diagrams Above						
	a	b	c	d	e	g
ZS3009	25.9	32.9	37.7	5.0	21.5	22.8
ZS3014	30.7	37.7	37.7	5.0	21.5	22.8
ZS3020	36.6	43.6	37.7	5.0	21.5	22.8
ZS3025	42.6	49.6	37.7	5.0	21.5	22.8

To Backmount (radial mount) a Zs30 motor, an accessory adapter set is required. The M6 is typically used for most models, and M8 set for larger props/spinners.

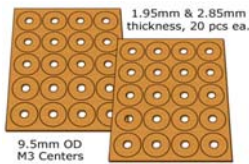
Install supplied M5 collar when backmounting



Adapter Set#	X	Z
ZS30-BKADAP-6L	24	M6
ZS30-BKADAP-8XL	28	M8

BackMounted Dimensions		
	h	i
ZS3009	2.92	38.5
ZS3014	2.92	43.4
ZS3020	2.92	49.3
ZS3025	2.92	55.3

The tables below give stack lengths for combinations of hard-ply spacers included in the BKADAP backmount sets. The thin spacers are 1.95mm, and thicker are 2.85mm



1.95 x	2	3	4	5	6
stack, mm	3.90	5.85	7.80	9.75	11.70
2.85 x	2	3	4	5	6
stack, mm	5.70	8.55	11.40	14.25	17.10

1.95mm Spacers Used						
		1	2	3	4	5
2.85mm Spacers Used	1	4.80	6.75	8.70	10.65	12.60
	2	7.65	9.60	11.55	13.50	15.45
	3	10.50	12.45	14.40	16.35	18.30
	4	13.35	15.30	17.25	19.20	21.15

To adapt new Zs series motors to models which suggest previous "Z" series motors, see the required spacer thicknesses below, and use the chart above to decide best-fit combination.

backmounted motors		Change to Zs Series: Spacer mm			
		Zs3009	Zs3014	Zs3020	Zs3026
Legacy "Z" Series	Z3007	5.90	n/a	n/a	n/a
	Z3013	11.90	6.90	n/a	n/a
	Z3019	n/a	12.90	6.90	n/a
	Z3025	n/a	n/a	12.90	6.90

Note: Zs motors are more efficient, so in many cases you may size-down the "Z" motor originally recommended for a model when using Zs. (for example, Z3019 replaced by Zs3014). However, do consider and check CG to be sure the model will balance with a lighter motor.

Hyperion Zs30 Series Motor Test Data

All data below was collected with previous generation LiPo, ESC, and Optical Tachometer. In some cases the batteries delivered relatively low voltage output (blue highlight). Use of new G3 Lipo packs may result in currents up to 5%~15% higher and corresponding increase in rpm. Tests with Hyperion G3 LiPo, Atlas ESC, and Emeter II Phase Tachometer will be posted by June 1 2009.

Appearance of a propeller/battery combination does not necessarily indicate that it is suitable for the motor or a particular model. See the Zs Datasheet for recommended max currents and wattage limits.

HP-ZS3009-20					
Prop Size	Cells (S)	V	A	W	RPM
APC 9x6E	2	7.72	13	101	7725
APC 10x5E	2	7.69	14	108	7620
APC 11x5.5E	2	7.62	18.8	143	7155
APC 12x6E	2	7.53	24.2	182	6630
APC 13x6.5E	2	7.46	28.4	212	6180
APC 14x7E	2	7.41	33.2	246	5730
APC 8x4E	3	11.77	14.5	171	12030
APC 8x6E	3	11.57	23.5	272	11010
APC 9x4.5E	3	11.60	21.3	247	11220
APC 9x6E	3	11.50	25.9	297	10680
APC 10x5E	3	11.45	28	320	10440
APC 11x5.5E	3	11.29	36.1	408	9540
APC 12x6E	3	11.15	45.7	510	8580

HP-ZS3014-12					
Prop Size	Cells (S)	V	A	W	RPM
APC 11x5.5E	2	7.62	21.2	161	7500
APC 12x6E	2	7.51	28.1	211	7080
APC 13x6.5E	2	7.45	34	253	6690
APC 14x7E	2	7.34	40.9	300	6285
APC 8x6E	3	11.55	26.2	303	11460
APC 9x4.5E	3	11.58	23.9	277	11610
APC 9x6E	3	11.45	29.5	338	11190
APC 10x5E	3	11.41	31.8	363	11040
APC 10x7E	3	10.52	38.6	406	9870
APC 11x5.5E	3	11.20	43.1	484	10230

HP-ZS3014-14					
Prop Size	Cells (S)	V	A	W	RPM
APC 12x6E	2	7.70	19.6	151	6450
APC 13x6.5E	2	7.62	24.2	184	6150
APC 14x7E	2	7.53	29.2	220	5820
APC 15x8E	2	7.41	38.5	285	5220
APC 9x6E	3	11.74	20.2	237	10110
APC 10x5E	3	11.69	21.7	254	9960
APC 11x5.5E	3	11.55	29.9	345	9450
APC 11x7E	3	10.62	33.3	354	8730
APC 12x6E	3	11.36	39.9	453	8730

All data below was collected with previous generation LiPo, ESC, and Optical Tachometer. In some cases the batteries delivered relatively low voltage output (blue highlight). Use of new G3 Lipo packs may result in currents up to 5%~15% higher and corresponding increase in rpm. Tests with Hyperion G3 LiPo, Atlas ESC, and Emeter II Phase Tachometer will be posted by June 1 2009.

Appearance of a propeller/battery combination does not necessarily indicate that it is suitable for the motor or a particular model. See the Zs Datasheet for recommended max currents and wattage limits.

HP-ZS3020-8					
Prop Size	Cells (S)	V	A	W	RPM
APC 11×5.5E	2	7.58	23.9	181	7755
APC 12×6E	2	7.46	31.5	235	7320
APC 13×6.5E	2	7.38	38.7	285	6990
APC 13×8E	2	7.12	40.4	288	6480
APC 14×7E	2	7.27	47.2	344	6585
APC 8×6E	3	11.50	29.4	338	11820
APC 9×4.5E	3	11.53	26.1	301	12000
APC 9×6E	3	11.39	32.8	374	11580
APC 10×5E	3	11.33	35.4	402	11400
APC 10×7E	3	10.45	39.7	415	10110
APC 11×5.5E	3	11.12	49	545	10680

HP-ZS3020-10					
Prop Size	Cells (S)	V	A	W	RPM
APC 13×6.5E	2	7.65	23.9	183	6210
APC 14×7E	2	7.57	29.5	223	5955
APC 15×8E	2	7.41	40.7	301	5430
APC 9×6E	3	11.77	19.2	226	10020
APC 10×5E	3	11.72	21.2	248	9930
APC 10×7E	3	10.83	24.8	269	8940
APC 10×10E	3	10.50	34.1	358	8250
APC 11×5.5E	3	11.58	29	337	9480
APC 12×6E	3	11.38	40	456	8850
APC 13×6.5E	3	11.24	48.3	543	8460
APC 9×6E	4	15.51	33.1	514	12750
APC 10×5E	4	15.43	36	556	12570
APC 10×7E	4	14.91	44.9	670	11700
APC 11×5.5E	4	15.15	50.1	760	11790

All data below was collected with previous generation LiPo, ESC, and Optical Tachometer. In some cases the batteries delivered relatively low voltage output (blue highlight). Use of new G3 Lipo packs may result in currents up to 10%~20% higher and corresponding increase in rpm. Tests with Hyperion G3 LiPo, Atlas ESC, and Emeter II Phase Tachometer will be posted by June 1 2009.

Appearance of a propeller/battery combination does not necessarily indicate that it is suitable for the motor or a particular model. See the Zs Datasheet for recommended max currents and wattage limits.

HP-ZS3025-6					
Prop Size	Cells (S)	V	A	W	RPM
APC 10x5E	2	7.57	28.8	218	9270
APC 11x5.5E	2	7.41	38.8	288	8685
APC 12x6E	2	7.29	48.3	352	8190
APC 13x6.5E	2	7.14	58.5	418	7590
APC 14x7E	2	7.02	68.8	483	7050
APC 8x6E	3	10.33	40.4	417	12330
APC 9x4.5E	3	10.42	34.6	361	12690
APC 9x6E	3	10.19	44.5	454	12000
APC 10x5E	3	10.05	48.4	487	11670
APC 10x7E	3	9.83	58.5	575	11010
APC 11x5.5E	3	9.75	64	624	10680
APC 12x6E	3	9.54	77.6	740	9870

HP-ZS3025-08					
Prop Size	Cells (S)	V	A	W	RPM
APC 13x6.5E	2	7.51	31.4	236	6555
APC 14x7E	2	7.41	38.1	283	6210
APC 15x8E	2	7.22	50.1	362	5595
APC 10x7E	3	10.48	31.9	335	9420
APC 10x7E	3	10.96	34.8	382	9810
APC 10x10E	3	10.17	44.3	451	8640
APC 11x5.5E	3	10.36	33.2	345	9240
APC 12x6E	3	10.17	41.9	427	8730
APC 13x6.5E	3	10.00	51.8	518	8205
APC 9x6P	4	14.88	35.9	535	13470
APC 10x5SP	4	14.64	41.2	604	13050
APC 10x7E	4	14.26	54.8	782	12120

HP-ZS3025-10					
Prop Size	Cells (S)	V	A	W	RPM
APC 13x6.5E	3	10.55	30.2	319	7275
APC 14x7E	3	10.36	37.5	389	6900
APC 15x8E	3	10.05	51.1	514	6270
APC 10x5SP	4	15.27	23	352	11100
APC 10x7E	4	15.00	31.2	468	10620
APC 10x10E	4	14.64	44.9	658	9840
APC 12x6SP	4	14.67	44.3	650	9870