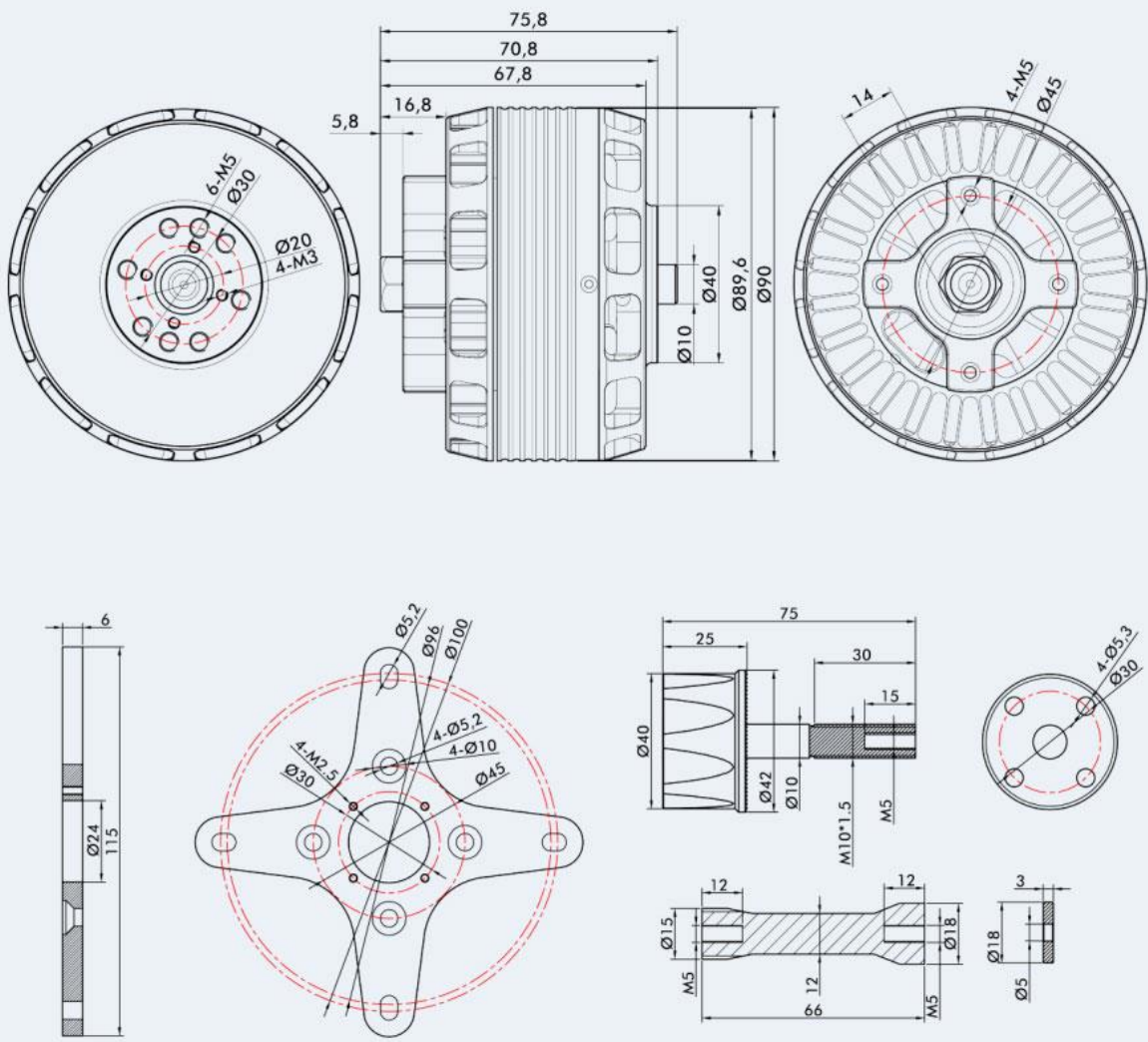


Product Drawing



Specifications

Test Item	KV180	Weight (Incl. Cable)	865g
Motor Dimensions	$\Phi 90 \times 70.8 \text{mm}$	Internal Resistance	16m $\Omega$
Lead	Wound Wire Outlet 100mm	Configuration	24N28P
Shaft Diameter	IN: 12mm OUT: 10mm	Rated Voltage(LiPo)	10-14S
Idle Current(10V)	4.6A	Peak Current(180s)	120A
Max. Power(180s)	5600W/14S		
Test Item	KV210	Weight (Incl. Cable)	870g
Motor Dimensions	$\Phi 90 \times 70.8 \text{mm}$	Internal Resistance	12m $\Omega$
Lead	Wound Wire Outlet 100mm	Configuration	24N28P
Shaft Diameter	IN: 12mm OUT: 10mm	Rated Voltage(LiPo)	10-12S
Idle Current(10V)	5.3A	Peak Current(180s)	135A
Max. Power(180s)	5500W/12S		

Test Report

Type	Propeller	Throttle	Voltage (V)	Current (A)	Power (W)	RPM	Torque (N*m)	Thrust (g)	Efficiency (g/W)	Operating Temperature (°C)
23*10		40%	44.40	9.68	429.80	3030	0.850	2451	5.70	63°C
		45%	44.53	12.54	558.40	3360	1.060	3169	5.70	
		50%	44.45	15.97	709.90	3690	1.300	3962	5.60	
		55%	44.42	19.37	860.40	3990	1.530	4782	5.60	
		60%	44.06	25.00	1101.50	4350	1.860	5849	5.30	
		65%	44.01	30.35	1335.70	4680	2.160	6880	5.20	
		70%	43.66	35.97	1570.50	4980	2.480	7968	5.10	
		75%	43.72	43.17	1887.40	5280	2.810	9075	4.80	
		80%	43.45	50.77	2206.00	5580	3.150	10163	4.60	
		90%	42.82	68.97	2953.30	6090	3.900	12514	4.20	
100%	42.31	89.84	3801.10	6660	4.710	14996	3.90			
24*10		40%	44.48	10.59	471.00	3000	0.980	2844	6.00	77°C
		45%	44.45	13.91	618.30	3330	1.240	3681	6.00	
		50%	44.62	17.67	788.40	3660	1.500	4553	5.80	
		55%	43.99	22.01	968.20	3930	1.770	5427	5.60	
		60%	44.00	27.49	1209.60	4320	2.120	6615	5.50	
		65%	43.79	33.26	1456.50	4590	2.460	7739	5.30	
		70%	43.67	40.37	1763.00	4920	2.850	8992	5.10	
		75%	43.62	48.29	2106.40	5190	3.210	10215	4.80	
		80%	43.19	56.56	2442.80	5490	3.580	11447	4.70	
		90%	42.50	76.01	3230.40	6000	4.380	13980	4.30	
100%	41.97	102.08	4284.30	6510	5.310	16889	3.90			
		40%	44.68	11.61	518.70	2970	1.140	3277	6.30	
		45%	44.31	15.40	682.40	3330	1.440	4226	6.20	
		50%	44.35	19.36	858.60	3600	1.720	5154	6.00	
		55%	44.16	24.25	1070.90	3870	2.010	6120	5.70	

AT8020 KV180	25*10	60%	44.07	30.09	1326.10	4170	2.370	7307	5.50	93°C
		65%	43.72	37.41	1635.60	4500	2.810	8699	5.30	
		70%	43.77	45.69	1999.90	4830	3.230	10085	5.00	
		75%	43.26	53.95	2333.90	5100	3.620	11455	4.90	
		80%	43.17	63.48	2740.40	5400	4.030	12741	4.60	
		90%	42.40	84.18	3569.20	5880	4.890	15371	4.30	
		100%	41.53	111.25	4620.20	6330	5.800	18121	3.90	
	22*10	40%	51.76	10.62	549.70	3510	0.960	2971	5.40	85°C
		45%	51.66	13.66	705.70	3870	1.190	3776	5.40	
		50%	51.77	16.94	877.00	4200	1.430	4632	5.30	
		55%	51.38	22.17	1139.10	4650	1.790	5859	5.10	
		60%	51.19	27.80	1423.10	5100	2.140	7130	5.00	
		65%	51.11	33.74	1724.50	5430	2.470	8253	4.80	
		70%	50.89	40.94	2083.40	5790	2.830	9448	4.50	
		75%	50.60	49.32	2495.60	6150	3.210	10709	4.30	
		80%	50.48	57.52	2903.60	6450	3.550	11875	4.10	
		90%	49.83	75.64	3769.10	7050	4.370	14487	3.80	
	23*10	40%	51.80	11.77	609.70	3450	1.120	3457	5.70	HOT
		45%	51.79	15.06	780.00	3810	1.400	4383	5.60	
		50%	51.62	19.29	995.70	4140	1.670	5330	5.40	
		55%	51.36	24.37	1251.60	4560	2.030	6546	5.20	
		60%	51.31	31.66	1624.50	4980	2.450	7891	4.90	
		65%	51.03	38.55	1967.20	5340	2.800	9114	4.60	
		70%	50.82	45.67	2320.90	5640	3.210	10413	4.50	
		75%	50.61	55.87	2827.60	6030	3.660	11857	4.20	
		80%	50.31	64.08	3223.90	6300	4.100	13230	4.10	
		90%	49.80	87.38	4351.50	6870	4.970	15916	3.70	
		100%	48.88	113.55	5550.30	7410	5.910	18706	3.40	

Note: Motor temperature is motor surface temperature @100% throttle running 3mins.  
(Date above based on benchtest are for reference only, comparion with that of other motor types is not recommended.)

Type	Propeller	Throttle	Voltage (V)	Current (A)	Power (W)	RPM	Torque (N*m)	Thrust (g)	Efficiency (g/W)	Operating Temperature (°C)
AT8020 KV210	22*10	40%	44.11	12.97	572.10	3510	0.960	2879	5.00	86°C
		45%	44.09	16.65	734.10	3840	1.190	3693	5.00	
		50%	44.04	20.79	915.60	4290	1.450	4598	5.00	
		55%	43.82	26.64	1167.40	4680	1.740	5624	4.80	
		60%	43.53	32.77	1426.50	5070	2.080	6822	4.80	
		65%	43.50	39.92	1736.50	5400	2.400	7906	4.60	
		70%	43.10	46.75	2014.90	5760	2.760	9125	4.50	
		75%	43.17	58.51	2525.90	6120	3.160	10446	4.10	
		80%	42.40	68.72	2913.70	6450	3.510	11630	4.00	
		90%	42.04	90.18	3791.20	7020	4.290	14129	3.70	
	23*10	40%	44.20	14.08	622.30	3510	1.160	3301	5.30	HOT
		45%	43.95	18.53	814.40	3900	1.430	4221	5.20	
		50%	43.74	23.48	1027.00	4200	1.710	5160	5.00	
		55%	43.81	29.53	1293.70	4590	2.070	6357	4.90	
		60%	43.56	38.02	1656.20	4980	2.450	7650	4.60	
		65%	43.40	45.26	1964.30	5340	2.830	8928	4.50	
		70%	43.06	55.18	2376.10	5640	3.220	10211	4.30	
		75%	42.57	64.34	2739.00	5970	3.670	11594	4.20	
		80%	42.37	77.79	3296.00	6300	4.090	12942	3.90	
		90%	41.64	103.74	4319.70	6870	4.910	15486	3.60	
100%	41.04	131.38	5391.80	7350	5.850	18227	3.40			

Note: Motor temperature is motor surface temperature @100% throttle running 3mins.  
(Date above based on benchtest are for reference only, comparion with that of other motor types is not recommended.)

## Contents



Motor\*1



Parts Bag\*1

Please check that your package contains all the above items before use, If something is missing, please contact online customer service or leave message to [onlinesales@tmotor.com](mailto:onlinesales@tmotor.com)