

RD4006 KV390 UAV BLDC MOTOR



RD4006 KV390 Specifications	
Motor Type	Outrunner
KV Rating	390 KV
Maximum Thrust	2.3 KG
No of Slots / Magnet Poles	18/24
No Load Current	0.8A
Motor Efficiency	90.99%
Weight (Including Cable)	69 grams
Voltage Range	4-6S
Maximum Current (15 s)	27.5 A
Maximum Power	660W
Motor Diameter	44.4mm
Motor Length	21mm
Motor Torque Constant (gm.cm/A)	276.75
Cable Type / Length	17 AWG / 80mm
Copper wire Temperature Rating	90 °C
Winding material	100% Copper
IP Rating	IP34
Maximum Operating Temperature of the Magnet	150 °C
Recommended Propeller	15*52 (Folding)

PERFORMANCE DATA

TEST SETUP :

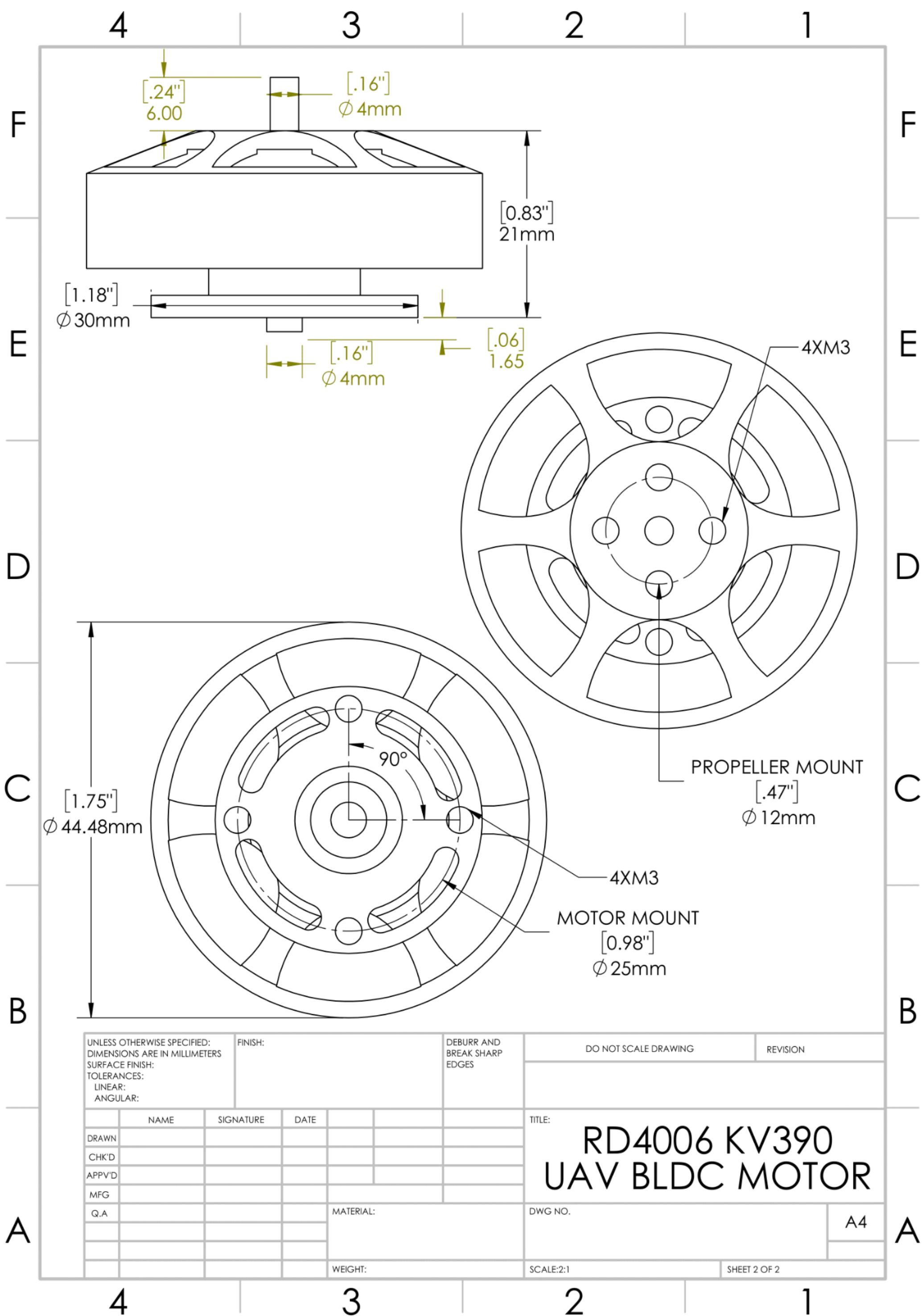
Motor:	RD4006 KV390
ESC :	RD-T-TZ-080-06-E-BTC
Operational Temperature:	-20 °C~ 85°C

Voltage	Propeller	Throttle (%)	Thrust (g)	Ampere (A)	Power (W)	Efficiency (g/W)
24V (6S)	15*5.2	50	1060	5.4	129.6	8.18
		60	1220	7	168	7.26
		70	1420	8.8	211.2	6.72
		85	1690	12	288	5.87
		100	2100	16.7	400.8	5.24

Multicopter design recommendations with RD4006:

Recommended Propeller: 1552 Folding or similar.
Recommended ESC: **RD-T-TZ-040-06-E-BTC** or similar.

- **Quad-copter:**
 - Maximum take-off weight for the drone: 3.76 KG
- **Hex-copter:**
 - Maximum take-off weight for the drone: 5.78 KG
- **Oct-copter:**
 - Maximum take-off weight for the drone: 7.56 KG



UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBURR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

	NAME	SIGNATURE	DATE		
DRAWN					
CHK'D					
APPV'D					
MFG					
Q.A					

MATERIAL:

WEIGHT:

TITLE:

RD4006 KV390
UAV BLDC MOTOR

DWG NO.

A4

SCALE:2:1

SHEET 2 OF 2