

FOSHAN SHUNDE YINGFUDA MICRO MOTOR CO.,LTD

MOTOR OUTGOING SPECIFICATION

Model No. :YFD390M-23500rpm(A86D -01020-0000R)

REV : 0

1. Motor Type:

Small DC motor

2. Standard Operating Conditions:

- 2-1 Rated voltage: 12.0V DC CONSTANT between motor terminals.
2-2 Direction of rotation: CCW When viewed from output shaft side.

3. Measuring Conditions:

- 3-1 Motor position: Motor to be held with shaft horizontally.
3-2 Power supply: Regulated power supply which assures unquestionable measurement.
3-3 Environment temperature and humidity: The test is made in principle at a temperature between 15°C and 35°C and at a relative humidity 75%

4. Electrical Characteristics (at initial stage after 30 seconds run-in):

- 4-1 No Load current: 1.0A max.
4-2 No Load speed: 23500±7% rpm.
4-3 No Load starting voltage: 1.2Vmax
4-4 Rated load current: 8.0A max .
4-5 Rated load speed: 19800 rpm Min
4-6 Rated load: Fan load with size 50x20 mm(approximately equivalent to / g-cm.)
4-7 Reference characteristic curve: See motor performance curves and characteristics.

5. Mechanical Characteristics:

- 5-1 External apperance: See motor outline
5-2 Shaft end play: 0.10~0.4 mm
5-3 Runout of shaft extension: 0.05 mm max.

6. Insulation Grade:

Class B

CONFIRMED & ACCEPTED BY CUSTOMER

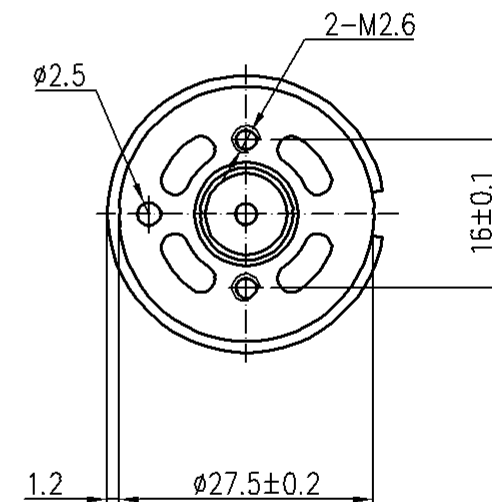
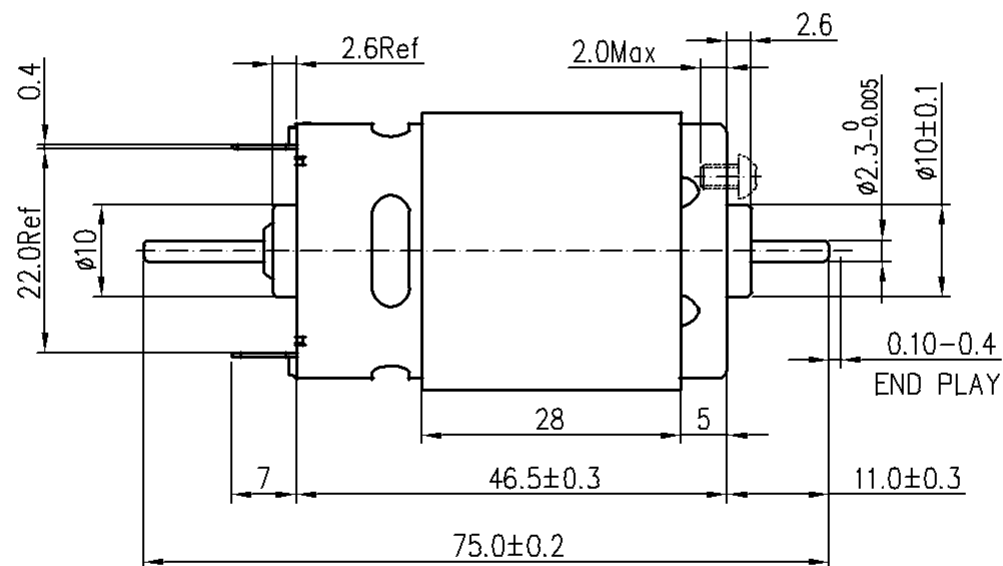
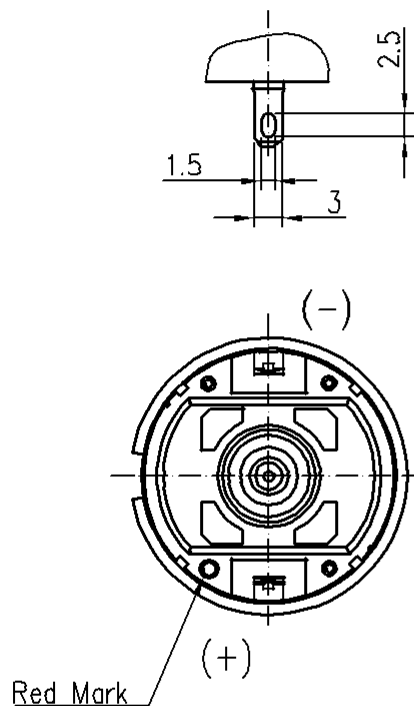
COMPANY, CHOP & SIGNATURE

DATE :

- 1) WHEN PRESS FITTING A GEAR,PULLEY OR ANYTHING ALIKE ONTO MOTOR OUTPUT SHAFT, DO PUSH THE OTHER SHAFT END VERTICALLY, DON'T PUSH THE REAR BRACKET
- 2) SOLDERING TEMPERATURE AND TIME MUST BE 360°(3SEC) OR 400°(2SEC).
- 3) MEASURING THE DIMENSION OF THE SHAFT EXTENSION WHEN THE OTHER END OF THE SHAFT IS AGAINST THE REAR BRACKET END.

ISSUE NO :

A86D-01020-0000R
YFD390M-23500rpm
DC 12V ***** (生产日期码)



					CONFIRMED & ACCEPTED BY CUSTOMER	TITLE: MOTOR OUTLINE	DES'D	YWjiang2/7-24			
					Company, Chop & Signature		CHK'D				
							PART NO: YFD390M-23500rpm (A86D-01020-0000R)	APP'D			
								SCALE	1:1	REV	A0
								YingFuDa Micro Motor			
											
ITME	WAS	DATE	DES'D	APP'D	DATE:						

FOSHAN SHUNDE YINGFUDA MICRO MOTOR

Motor performance curves and characteristics:

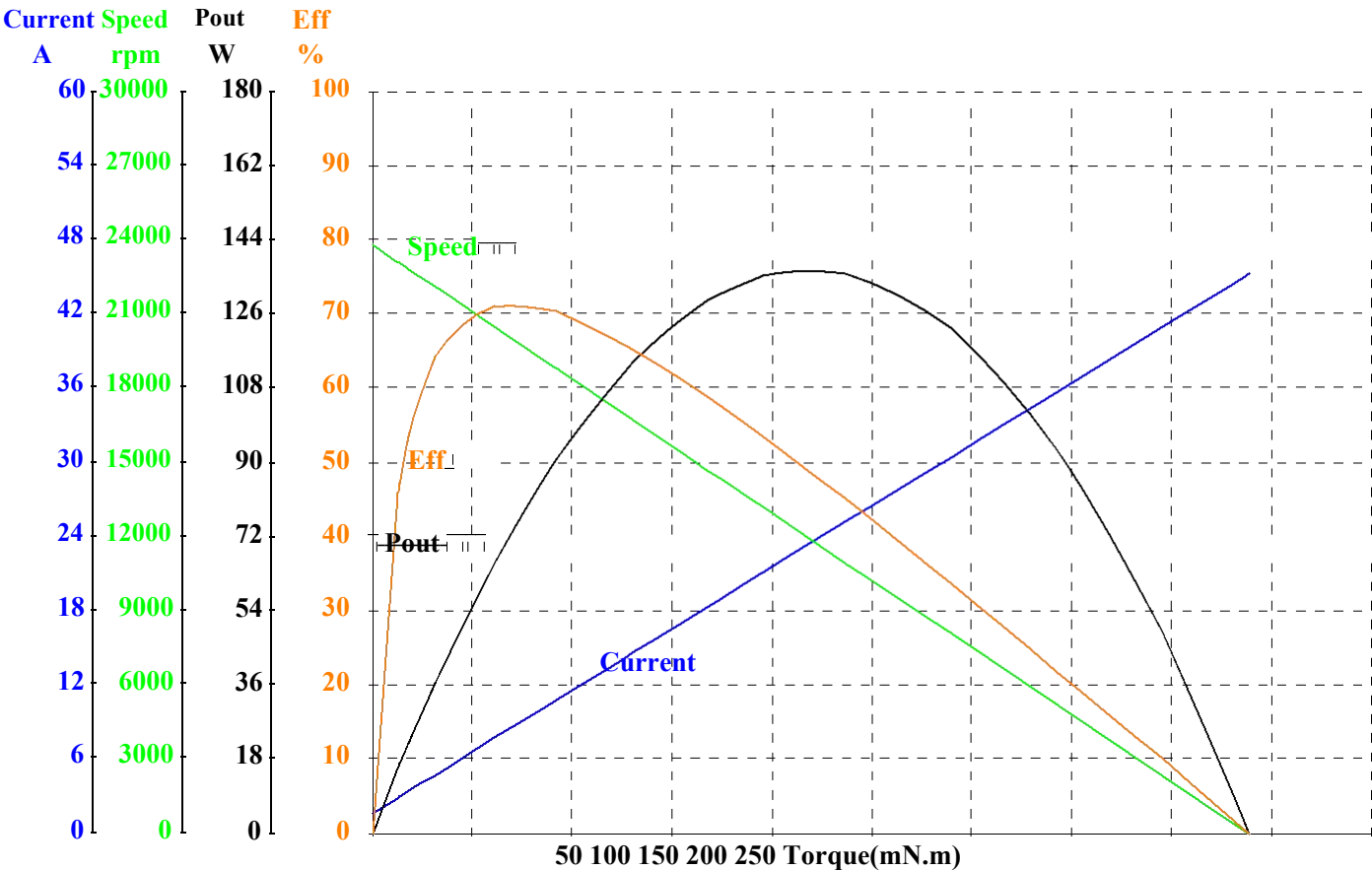
Voltage:12.0V

Motor Type: YFD390M-23500rpm

Tester:001

Number: 202407030017

Test Data: 2024.07.03



State	Voltage	Current	Pin	Torque	Speed	Pout	Eff
	V	A	W	mN. m	rpm	W	%
No_Load	12.02	2.658	31.93	6.6	23143	16.09	50.4
Rated							
Eff_max	12.01	10.46	125.6	46.1	18705	90.31	71.9
End	12.00	26.91	323.1	109.8	9988	114.9	35.5

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Motor performance curves and characteristics:

Voltage:	12.0V	Motor Type:	YFD390M-23500rpm
Tester:	001	Number:	202407030017
Test Data:	2024.07.03		

	Voltage	Current	Pin	Torque	Speed	Pout	Eff
Number	V	A	W	mN.m	rpm	W	%
1	12.02	1.589	19.10	0.0	23800	0.000	0.0
2	12.02	2.902	34.88	6.6	23085	15.95	45.7
3	12.02	2.882	34.64	6.5	23096	15.72	45.4
4	12.02	2.902	34.88	6.6	23085	15.95	45.7
5	12.02	2.902	34.88	6.6	23085	15.95	45.7
6	12.02	2.942	35.36	6.8	23062	16.42	46.4
7	12.02	2.981	35.84	7.0	23041	16.89	47.1
8	12.02	3.041	36.55	7.3	23008	17.59	48.1
9	12.02	3.240	38.94	8.3	22899	19.90	51.1
10	12.02	3.419	41.09	9.2	22803	21.96	53.4
11	12.02	3.737	44.92	10.8	22628	25.59	57.0
12	12.02	4.135	49.70	12.8	22411	30.03	60.4
13	12.02	4.732	56.87	15.8	22086	36.54	64.2
14	12.02	5.488	65.95	19.6	21673	44.48	67.4
15	12.02	6.443	77.42	24.4	21152	54.04	69.8
16	12.02	7.656	91.99	30.5	20490	65.43	71.1
17	12.01	8.969	107.8	37.1	19774	76.81	71.3
18	12.01	10.71	128.7	45.9	18822	90.40	70.2
19	12.01	10.76	129.2	46.1	18797	90.73	70.2
20	12.01	12.47	149.8	54.7	17864	102.3	68.3
21	12.01	14.22	170.7	63.5	16912	112.4	65.8
22	12.01	14.58	175.1	65.3	16714	114.3	65.3
23	12.01	16.32	196.0	74.1	15762	122.2	62.4
24	12.01	16.59	199.1	75.4	15618	123.3	61.9
25	12.00	18.33	220.1	84.2	14666	129.2	58.7
26	12.00	18.94	227.3	87.2	14337	130.9	57.6
27	12.00	20.68	248.2	96.0	13385	134.5	54.2
28	12.00	21.08	253.0	98.0	13166	135.1	53.4
29	12.00	22.83	273.9	106.8	12214	136.5	49.8
30	12.00	23.43	281.1	109.8	11884	136.6	48.6
31	12.00	25.18	302.0	118.6	10932	135.7	44.9
32	11.99	26.92	322.9	127.4	9979	133.1	41.2
33	11.99	28.67	343.8	136.1	9028	128.7	37.4
34	11.99	30.41	364.7	144.9	8074	122.5	33.6
35	11.99	32.16	385.6	153.7	7123	114.6	29.7
36	11.99	33.91	406.4	162.5	6169	104.9	25.8
37	11.99	35.65	427.3	171.2	5218	93.53	21.9
38	11.98	37.40	448.2	180.0	4264	80.38	17.9
39	11.98	39.14	469.0	188.8	3312	65.47	14.0
40	11.98	40.89	489.9	197.6	2360	48.81	10.0
41	11.98	42.64	510.7	206.3	1407	30.40	6.0
42	11.98	44.38	531.5	215.1	455	10.24	1.9
43	11.98	45.21	541.5	219.3	0	0.000	0.0