

Technical Data

Part Number	RB350050-22723R	
Customer P/N		
ITEM	Specifications	Note
1. Operation Status 1.1 Rated Voltage 1.2 Rated torque 1.3 Radial load 1.4 Axial load 1.5 Turning direction 1.6 Reverse direction 1.7 Using environment 1.8 Preserve environment 1.9 Using voltage range	12V D.C. 3.0 kgf.cm 1 kgf 0.7 kgf Shaft horizontal CW.CCW Temperature $-10\sim 50$ °C Humidity 20~85% RH Temperature $-10\sim 50$ °C Humidity 20~85% RH 12V (D.C.) $\pm 10\%$	Stable power source 10mm from shaft end
2. Electrical Characteristics 2.1 No Load current 2.2 No Load speed 2.3 Rated current 2.4 Rated speed 2.5 Stall current 2.6 Stall torque 2.7 Insulation 2.8 Durable voltage 2.9 Coil resistance 2.10 Torque constant 2.11 Voltage constant	300 mA max. 120 rpm $\pm 10\%$ 810 mA 109 rpm $\pm 10\%$ 9.44 A 53 kgf.cm D.C. 500V meg. 10 M Ω min 100V (A.C.), 1 minute min 1.27 Ω 5.61 kgf.cm/A 53.57 mV/r/min	Motor terminal shell Motor terminal shell Reference Reference Reference
3. Mechanical characteristic 3.1 Reduction ratio 3.2 Thrust play of shaft 3.3 Radial play of shaft 3.4 Back lash 3.5 Outside Appearance	1/50 0.35 mm max. 0.05 mm max. 2° max. No scratch defective....	By visual judgment
2. Life Cycle	108000 cycles min. 	After the rated life cycle test current @ rated load must stay within $\pm 30\%$ of the initial value and r.p.m. @ rated load must stay within $\pm 20\%$ of the initial value. However change of mechanical noise level was not considered as part of the testing

ASSEMBLY, MAINTENANCE, OPERATION

1. Install: To avoid internal geared motor touched by overlong screws and caused defective. Please check screw size and length on external dimension drawing when installing geared motor into construction.

2. Reprocess: Heavy impact and vibration during reprocessing output shaft may cause loose screws and lead to unbalance gear operation. Please avoid reprocessing output shaft. Must to prevent overheat when weld wires into terminal and cause breakdown due to burnt internal geared motor parts.
Please do not overload the radial load limitation of output shaft when using belt pulley or chain pulley as power transmission. Please do not overload the axial load limitation of output shaft when pressing parts upon it as well.

3. Environment: The parts of geared motors or itself may corroded or damaged easier when using or maintaining in out of range environment. Must to pay close attention that gears may corroded even under an allowed environment in long term.

4. Impact: Must prevent geared motor from falling and impact, or the parts will get damaged, the screws will be loosed, and the gear operation will unbalance etc...

5. Locked out: Please well prepared current transmitting protection in case of burnt motor coil easy and damaged gear from locked out geared motor.

6. Output shaft Turning:
Please note that it is easier to damage gear when directly turning output shaft.

7. PWM controlling:
The graphite brush of motor will be abnormally wore out or the commutator interval will be blocked by carbon powder when using in the condition of D/T under 60%.
Moreover, please pay attention to the motor with capacitor due to there is ineffectual capacity cycle scope.

8. Momentary reverse:
The graphite brush will be abnormally wore out or coil getting aggravated when geared motor is reversed momentary.
Also, the commutator interval will be stuck if switch frequently.

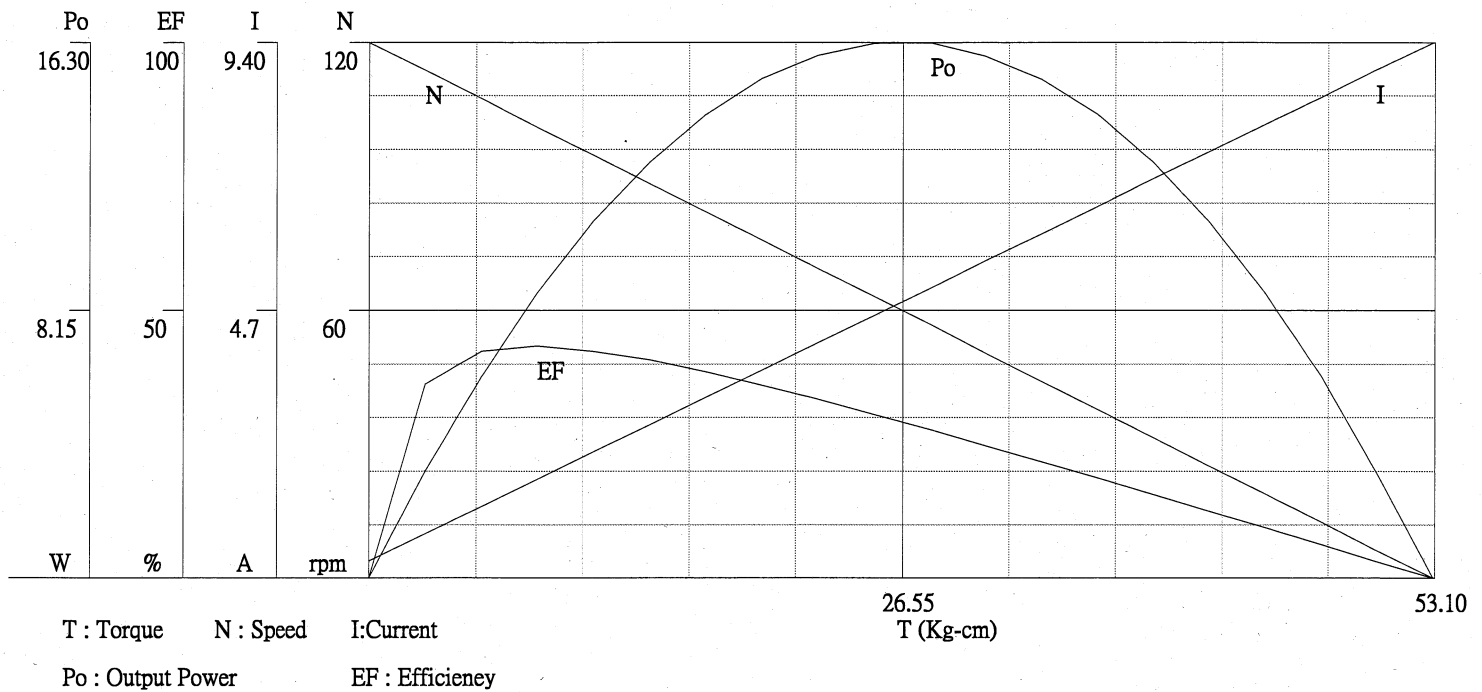
SHAYANG YE INDUSTRIAL CO.,LTD.

Mode: RB350050-22723R

S/N: 001

Voltage : 12 V

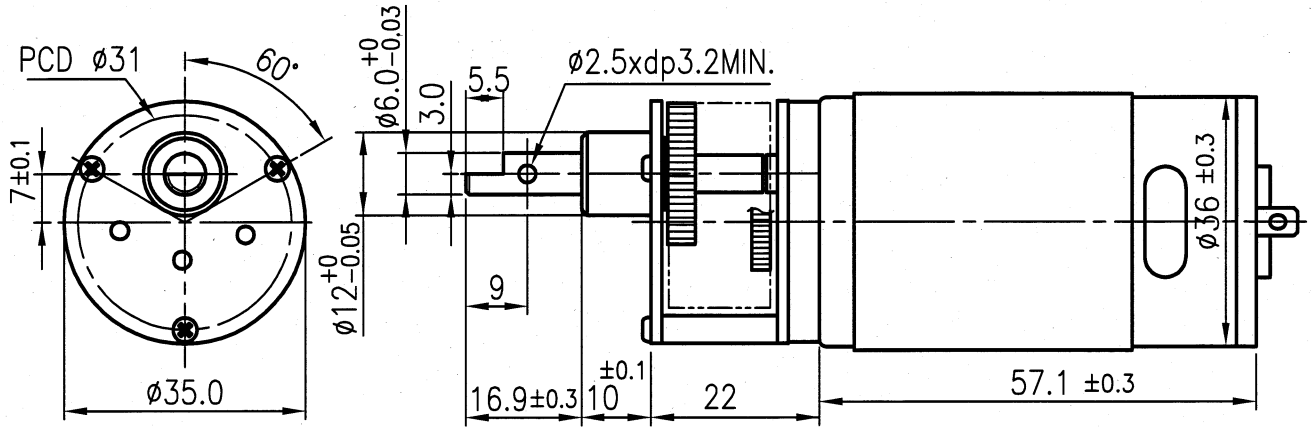
Date: 20141106



T : Torque N : Speed I: Current
Po : Output Power EF : Efficiency

	T(N/m)	[Kg/cm]	N(rpm)	I(A)	Po(W)	EF(%)
No Load	0	0.00	120.00	.30	0	0
	.27	2.79	113.75	.78	3.26	36.25
	1.09	11.15	94.81	2.22	10.85	42.39
	1.37	13.95	88.34	2.69	12.65	40.85
	1.64	16.72	82.09	3.17	14.09	38.58
	1.92	19.55	75.74	3.65	15.2	36.11
	2.19	22.32	69.45	4.13	15.91	33.47
	2.46	25.12	63.14	4.61	16.28	30.65
	3.01	30.66	50.51	5.57	15.89	24.79
	3.28	33.47	44.18	6.04	15.18	21.83
	3.55	36.26	37.92	6.52	14.11	18.8
	3.83	39.04	31.58	7.01	12.65	15.67
	4.1	41.82	25.27	7.48	10.85	12.58
	4.38	44.63	18.94	7.96	8.68	9.47
	4.92	50.16	6.31	8.92	3.25	3.16
Stall	5.2	53.00	0.00	9.40	0	0
Po...(max)	2.74	27.92	56.88	5.09	16.3	27.77
EF...(max)	.82	8.38	100.99	1.74	8.69	43.37

參考 REF.
估價 EVALUATE
試作 INITIAL
製作 MASS



REDUCTION RATIO: 1/50
 OUTPUT SHAFT: STEEL
 MOTOR SPECIFICATION: 12V 6000RPM
 NO LOAD SPEED : 120RPM

核准
APPROVED BY

研發
2014.11.6
張慶隆

核對
CHECKED BY

繪圖
DRAWN BY

一般公差表	軸徑 $\begin{matrix} 0 \\ - \end{matrix}$ 孔徑 $\begin{matrix} + \\ 0 \end{matrix}$ 長度, 角度 \pm -	1	新出圖							
	- 指定等級區分之數值公差									
	區分	1~6	6~18	18~50	50~120	120~250	250~500	500~1000	角度	
	等級	1級	0.1	0.2	0.3	0.4	0.5	0.6	0.8	1°
	2級	0.2	0.4	0.6	0.8	1.2	1.6	2.0	2°	
	未標示孔徑距公差	±0.1			±0.2					
	熱處理 HEAT TREATMENT		件名 PART NAME	GEARMOTOR					單位 UNITS	mm
	表面處理 SURFACE		圖號 DWG.	RB350050-22732R					比例 SCALE	1/1
	材質 MATERIAL									
	重量 WEIGHT	g(g)	頁次 SHEET	1/1						

設變單號
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