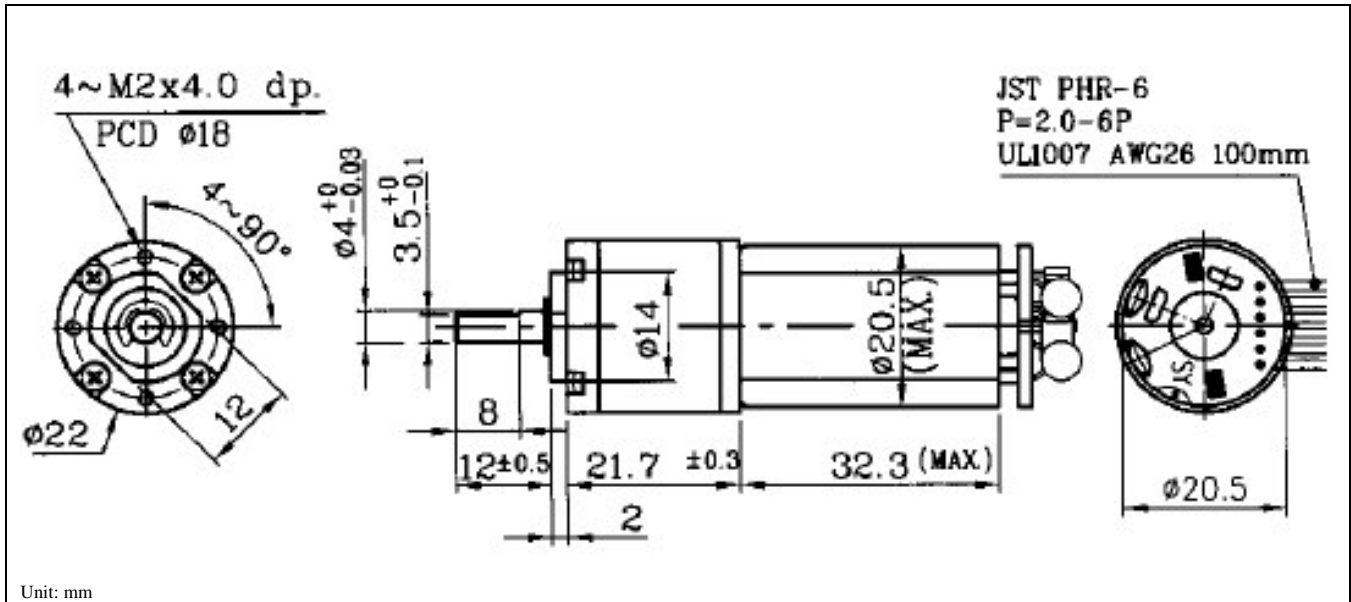
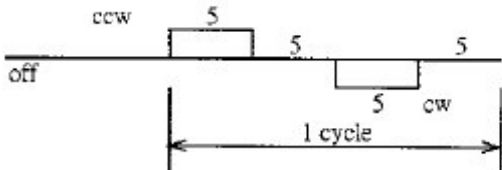


KYSAN SKU: 1030029  
 MFG: IG-22GM-12V1/84-2C6P  
 Rated: 12VD, 79RPM, 1.1 Kg-cm  
 No Load Speed: 94.9RPM  
 Reduction Ratio: 1/84  
 Output Shaft: Steel: 12 mm  
 Encoder: 2 Channels, 6 Poles magnetic  
 Gear Box: Sleeve Bearings  
 DC Motor: 12V 8000 RPM



REDUCTION RATIO: 1/84.3  
 OUTPUT SHAFT: STEEL  
 MOTOR SPECIFICATION: 12V 8000RPM  
 OUTPUT-94.9RPM  
 +2 CHANNEL 6POLE ENCODER

Part Number	IG22-1/84+12V+2CHANNL 6POLES		
Customer P/N			
ITEM	Specifications	Note	
1. Operation Status			
1.1 Rated Voltage	12V D.C.	Stable power source 6mm from shaft end	
1.2 Rated torque	1.1 kgf.cm		
1.3 Radial load	8N (0.8kg-f)		
1.4 Axial load	6N (0.6kg-f)		
1.5 Turning direction	Shaft horizontal		
1.6 Reverse direction	CW,CCW		
1.7 Using environment	Temperature -10-60 °C Humidity 20-90% RH		
1.8 Preserve environment	Temperature -20-70 °C Humidity 20-90% RH		
1.9 Using voltage range	12V (D.C.) ±10%		
2. Electrical Characteristics			
2.1 No Load current	80 mA max.		
2.2 No Load speed	95 rpm ±15%		
2.3 Rated current	210 mA		
2.4 Rated speed	79 rpm ±15%		
2.5 Stall current	0.97 A		
2.6 Stall torque	6.9 kgf.cm		
2.7 Insulation	D.C. 500V meg. 10 MΩ min		Motor terminal shell
2.8 Durable voltage	100V (A.C.) · 1 minute min		Motor terminal shell
2.9 Coil resistance	12.37Ω		Reference
2.10 Torque constant	7.11 kgf.cm/A	Reference	
2.11 Voltage constant	67.89 mV/r/min	Reference	
3. Mechanical characteristic			
3.1 Reduction ratio	1/84.29		
3.2 Thrust play of shaft	0.2 mm max.		
3.3 Radial play of shaft	0.05 mm max.		
3.4 Back lash	3° max.		
3.5 Outside Appearance	No scratch defective...	By visual judgment	
2. Life Cycle	72000 cycles min.		
		After the rated life cycle test current @ rated load must stay within ±30% of the initial value and r.p.m. @ rated load must stay within ±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.

