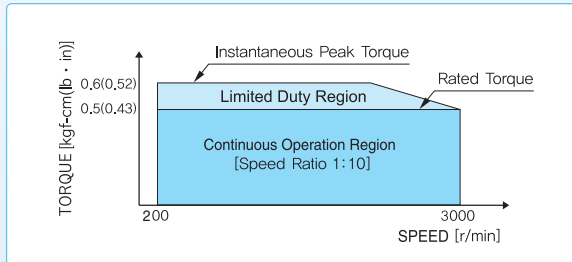


FEATURES OF BRUSHLESS MOTOR

EXCELLENT SPEED STABILITY, CONSTANT TORQUE

By comparing the feedback signal and the setting speed reference in the motor. This allows stable operate from low speed to high speed while the load torque changes. Additionally, in the full torque range from no-load to rated torque, it is possible to control the speed in the wide range.



COMPACT, HIGH POWER, REDUCED POWER LOSS

Due to the permanent magnet Rotor, the BLDC motor cuts down power loss by 50% in compared with AC induction motor. Thanks to this, the motor becomes smaller in size while generating the same amount of output. 42.5mm(1.67in) [□60(□2.36), □80(□3.15)], 57mm(2.24in)[□90(□3.54)].

EASY CONNECTION

Motor can operate simply by connecting the motor connector to control unit.

EXTERNAL CONTROL

Run/Stop, Change of rotation direction and instantaneous stop can be controlled with external signals(Sequencer or relay switch).

HIGH STRENGTH, LONG LIFE GEAR HEAD

Optimal gear design, strengthened case and advanced bearing design improved life of the gear head 2 times longer(10,000hrs) than that of AC Motor gear head. Also, 300kgf-cm[260.15(lb · in)], permissible torque has been achieved in identical size to the AC Motor gear head.



LOW NOISE

Achieved low-noise using new structure, design and processing technique of motor.

COMBINED MOTOR AND GEAR HEAD DESIGN

Features a simply configuration design where the motor and the gear head can be assembled easily using an exclusive bolt for safe, damage free assembly of the two units. This two units may also be purchased separately as replacement parts.

VARIOUS FUNCTIONS

SLOW RUN/SLOW STOP functions are included. Various protection functions are also included.

OTHERS

- The motor is designed as IP65, making it be safe against intermittent exposure to water. (cannot be used in places where water is constantly present).

MOTOR

RATED RPM

Motor RPM at rated output.

RATED TORQUE

Is maximum torque that motor can continuously generate.

STARTING (INSTANTANEOUS PEAK) TORQUE

Generates up to 120% of the rated torque for approximately five seconds. Effective for accelerating under inertia load, etc.

PERMISSIBLE INERTIA LOAD(GD²)

Commonly expressed in multiples of rotor inertial moment.

RATE OF SPEED FLUCTUATION

Indicate percentile value of the motor speed fluctuation with respect to load change, temperature change and voltage fluctuation.

CONTINUOUS OPERATION REGION

A region where the motor can continuously operate against the load in N-T graph.

LIMITED DUTY REGION

A region where the motor can operate for approximately 5 seconds. This region is correspond to the case of accelerating inertia load.

OVERLOAD PROTECTION

Automatically blocks motor input if the motor torque exceeds the rated level for longer than five seconds, preventing damages to the motor and diver.

SPEED SIGNAL OUTPUT

Generates a pulsewave signal the frequency of that is proportion to the motor speed by an Opencollector method. The user is then able to monitor motor speed with this signal.

ALARM SIGNAL OUTPUT

Activated when the protection function works. Once activated, the red LED turns on and the motor comes to a halt.

GEAR HEAD**■ REDUCTION RATIO**

Ratio of the gear head reducing the motor speed. RPM of gear head output shaft becomes (1/reduction ratio) of motor RPM.

■ MAXIMUM PERMISSIBLE TORQUE

This value is determined depending on reduction ration and the gear head type.

■ SERVICE FACTOR

This factor was determined from experienced factors as types of load, surface temperature and other application conditions.

■ TRANSFER EFFICIENCY

Efficiency of gear head amplifying torque. This value is dependent on bearing, gear friction and viscosity of lubricant.

■ OVERHANG LOAD

Load at a right angle to the gear head output shaft. Maximum load that the gear head can bear is called permissible overhang load, which is dependent on type fo the gear head and distance form end of the output shaft. Forms of the load include belt tension, etc.

■ THRUST LOAD

Load along the gear head output shaft. Maximum load that the gear head can bear is called permissible thrust load, which is dependent of type of the gear head.