

For better use of our Catalog

〈For specifications〉

Specifications in this product catalog are subject to change without prior notice. Detailed specifications are omitted for some of the products due to limited space.

Please inquire and ask for individual specification sheets when ordering.

〈Information〉

- Please note that the following models with The products indicated by ➡ mark will be manufactured upon receipt of your order.
- ➡ mark models
- POLYGON LASER SCANNERS

Those without ➡ mark are standard stock items unless otherwise specified.

Our product catalog consists of two volumes.

This catalog, the second volume, carries product information on sensors and motors. Please see the first volume for other products such as switches, trimmers, attenuators, circuit protector and so on.

Note prior to placing order

The product is not designed for use in equipment or devices that could have an impact on life or body, or those that could damage property (These include, but are not limited to, medical equipment, disaster prevention equipment, security equipment, combustion control equipment, infrastructure control equipment, vehicle equipment, transportation equipment, on-board equipment, aviation equipment, space equipment, and nuclear-related equipment).

If you want to use this product for any of the above-mentioned equipment or devices, be sure to contact our point of contact beforehand. The details of warranty shall be as per the descriptions in this document and we shall not be liable for any damage on you resulting from the use of any equipment or device (including control systems) which is not in accordance with this document (hereinafter referred to as "use in violation").

In the case where you resell our products, we shall not be liable for any damage on a third party resulting from use in violation by the third party, and even if we make payment to the third party in connection with such use in violation regardless of the name by which such payment may be called, we may demand the whole amount thereof from you.

〈Warranty Period〉

The warranty period is one year from the date of delivery. The warranty is only applicable to the product itself, not applicable to consumable products such as batteries and etc.

〈Warranty Coverage〉

If any malfunctions should occur due to our fault, NIDEC COMPONENTS warrants any part of our product within one year from the date of delivery by repair or replacement at free of charge. However, warranty is not applicable if the causes of defect should result from the following conditions:

- Failure or damages caused by inappropriate use, inappropriate conditions, and inappropriate handling.
- Failure or damages caused by inappropriate modifications, adjustment, or repair.
- Failure or damage caused by technically and Scientifically unpredictable factors.
- Failure or damage caused by natural disaster, fire or unavoidable factors.

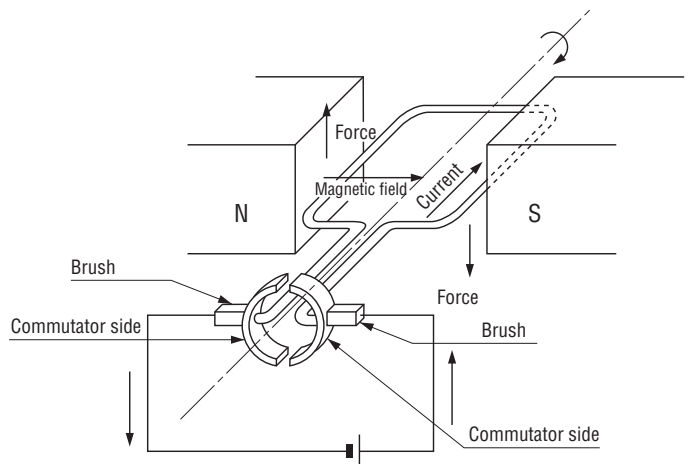
DC GEARED MOTORS

QUICK REFERENCE TABLE

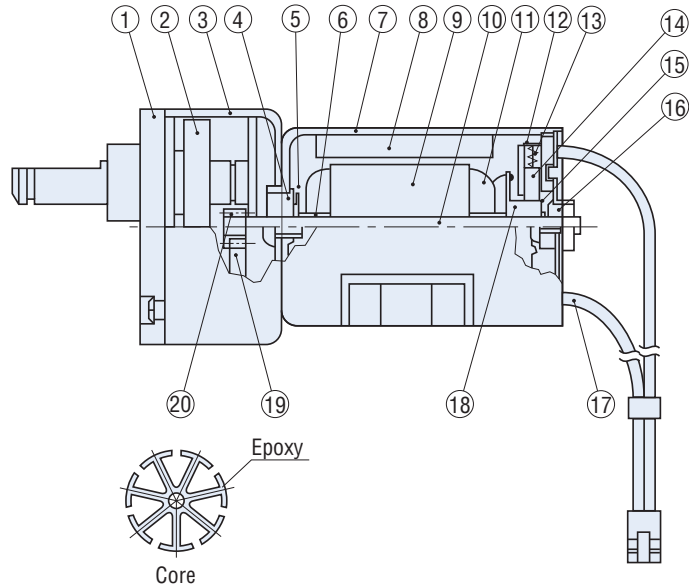
φ 16mm series				φ 37mm series
LA16G324B50MC	LA16G324B120MC	MG16B	HG16	HG37
				

OPERATING PRINCIPLES

The operating explanation is as follows.
 When an electric current is passed through the rotor through the commutator, because it is in the magnetic field, it rotates. This rotational force is used to perform mechanical work.



■ BASIC CONSTRUCTIONS



Part name			
①	Flange	⑪	Coil wire
②	Gear block assembly	⑫	Brush holder
③	Gear case	⑬	Brush spring
④	Metal	⑭	Brush
⑤	Washer	⑮	Oil differential
⑥	Sleeve	⑯	Metal
⑦	Case	⑰	Lead wire
⑧	Magnet	⑱	Commutator
⑨	Core	⑳	First stage gear
⑩	Shaft		Pinion

■ GLOSSARY

● Rated torque

The torque generated when running at the rated voltage and rated current.

● Rated revolutions per minute

The revolution when running at rated torque.

● No load speed

Output shaft speed with no load when rated voltage is applied.

● Momentary maximum current

The maximum current that can be tolerated for one second without demagnetizing the magnets or causing other damage.

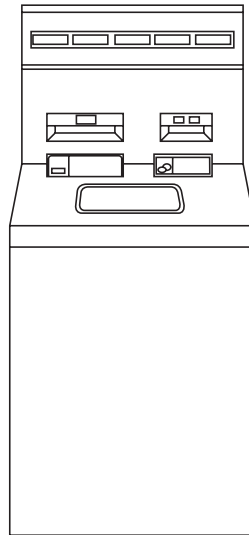
● Torque constant

The torque generated by the motor when a current of 1 A is applied.

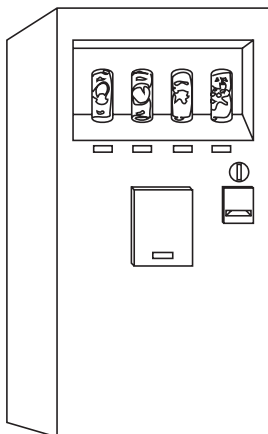
DC GEARED MOTORS

APPLICATIONS

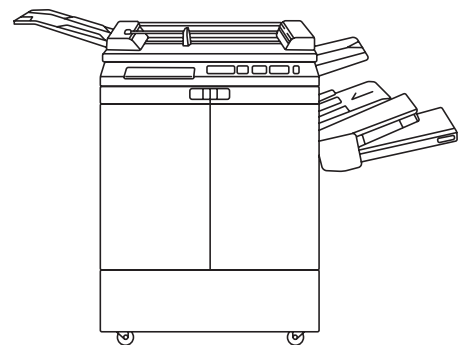
- For actuation of front shutters of cash dispensers (ATM)



- Transport mechanism for vending machines



- Paper feeder in copying machines

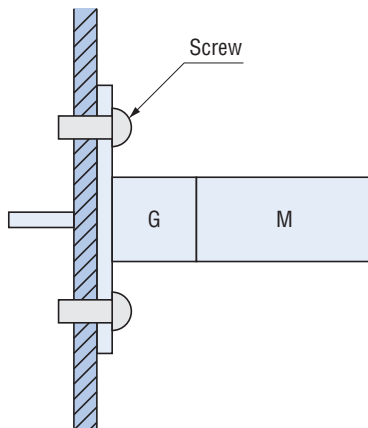


- Increasing the reduction ratio produces increased torque, but there are limits to the strength of the material, so if the starting torque for the geared motor exceeds the guaranteed strength, avoid locking the output shaft.
- When using belts or cams to transmit the torque from the output shaft, problems can occur to the PV value of the gear shaft material drastically reducing the life, so due care is required.
- Avoid press fitting components to the output shaft.

- Avoid press fitting components to the output shaft.
- When using pulse drive in the operating mode, be careful to avoid applying unnecessary shock loads to the gears.
- Do not attempt to modify or disassemble the DC geared motors. In particular, pinholing or cutting the shaft will result in degraded performance and should be absolutely avoided.

■ INSTALLATION

● Attachment flange type



● Body attachment type

