

## AC Servo Drives Σ-7-Series Servomotors with Batteryless Encoders

# No Battery, No Maintenance

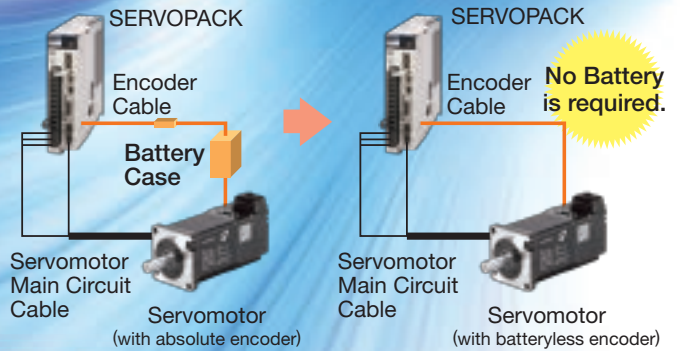


Σ-7 Series  
Applicable models  
SGM7J  
SGM7A  
SGM7P  
SGM7G



### Easier Wiring

You can eliminate Batteries and Battery Cases used for individual Servo Drives or on the host controller to simplify wiring in the control panel.



### Maintenance-free



### No time or effort for replacement

There is no need to perform battery replacement during maintenance work every two years.



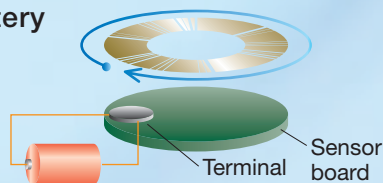
### No inventory management

There is no need to stock batteries.

### Batteryless Encoder Mechanism

#### With battery

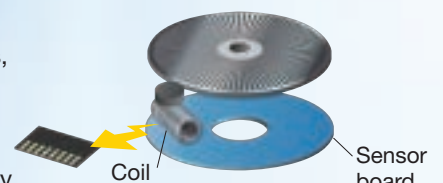
Data in volatile memory is saved with the use of a battery.



If the battery runs out, the rotational data will be lost.

#### Batteryless

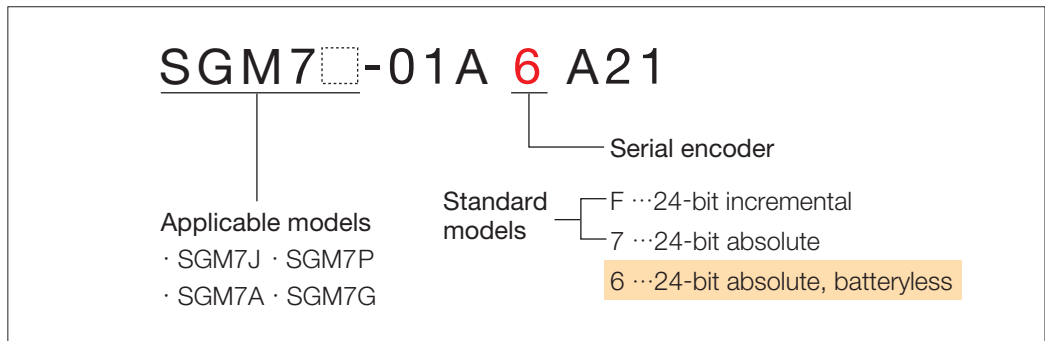
When the motor turns, power is generated by the magnet and coil to store the data in non-volatile memory.



Batteryless encoders remove worries about the battery running out and losing rotational data.

## Model Designations

The code is "6" for the 4th digit of the servomotor with batteryless encoder.



## Specifications

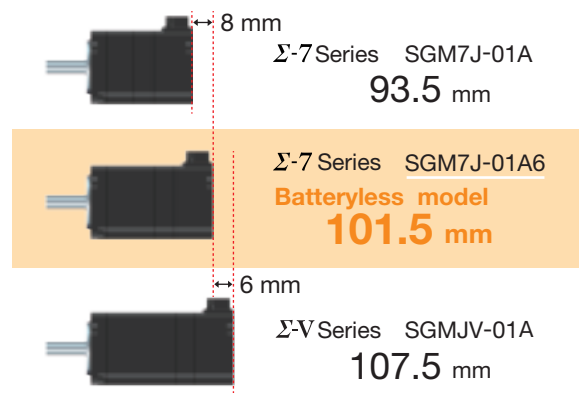
The lineup includes all Σ-7-Series rotary servomotors. You can replace your current motors with no change in performance.

Surrounding Air Temperature	0°C to 40°C (With derating, usage is possible between 40°C and 60°C.)
Impact Acceleration Rate	490 m/s <sup>2</sup>
Vibration Acceleration Rate	49 m/s <sup>2</sup> *
Motor Service Life	Same as for standard Σ-7-Series servomotors (Data can be saved for the length of the motor service life.)

\*: The vibration acceleration rate differs for the following models.  
 SGM7A-15 to -50: 24.5 m/s<sup>2</sup> front to back  
 SGM7A-70 : 14.7 m/s<sup>2</sup>  
 SGM7G-03 to -44: 24.5 m/s<sup>2</sup> front to back  
 SGM7G-55 to -1E: 24.5 m/s<sup>2</sup>

Note: Use the cables for incremental encoders.

## Motor Length (comparison with 100 W model)



Note: For 100 W model

- Comparison with Σ-7 standard models:  
 All servomotors are only 8 mm longer than the standard models.
- Comparison with Σ-V:  
 The overall length of the SGM7A or SGM7J has been reduced, but the overall length of the SGM7P or SGM7G has increased.

## Certified for International Standards



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### Product Information Site

<http://www.e-mechatronics.com/en/>

In the event that the end user of this product is to be the military and said product is to be employed in any weapons systems or the manufacture thereof, the export will fall under the relevant regulations as stipulated in the Foreign Exchange and Foreign Trade Regulations. Therefore, be sure to follow all procedures and submit all relevant documentation according to any and all rules, regulations and laws that may apply. Specifications are subject to change without notice for ongoing product modifications and improvements.

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