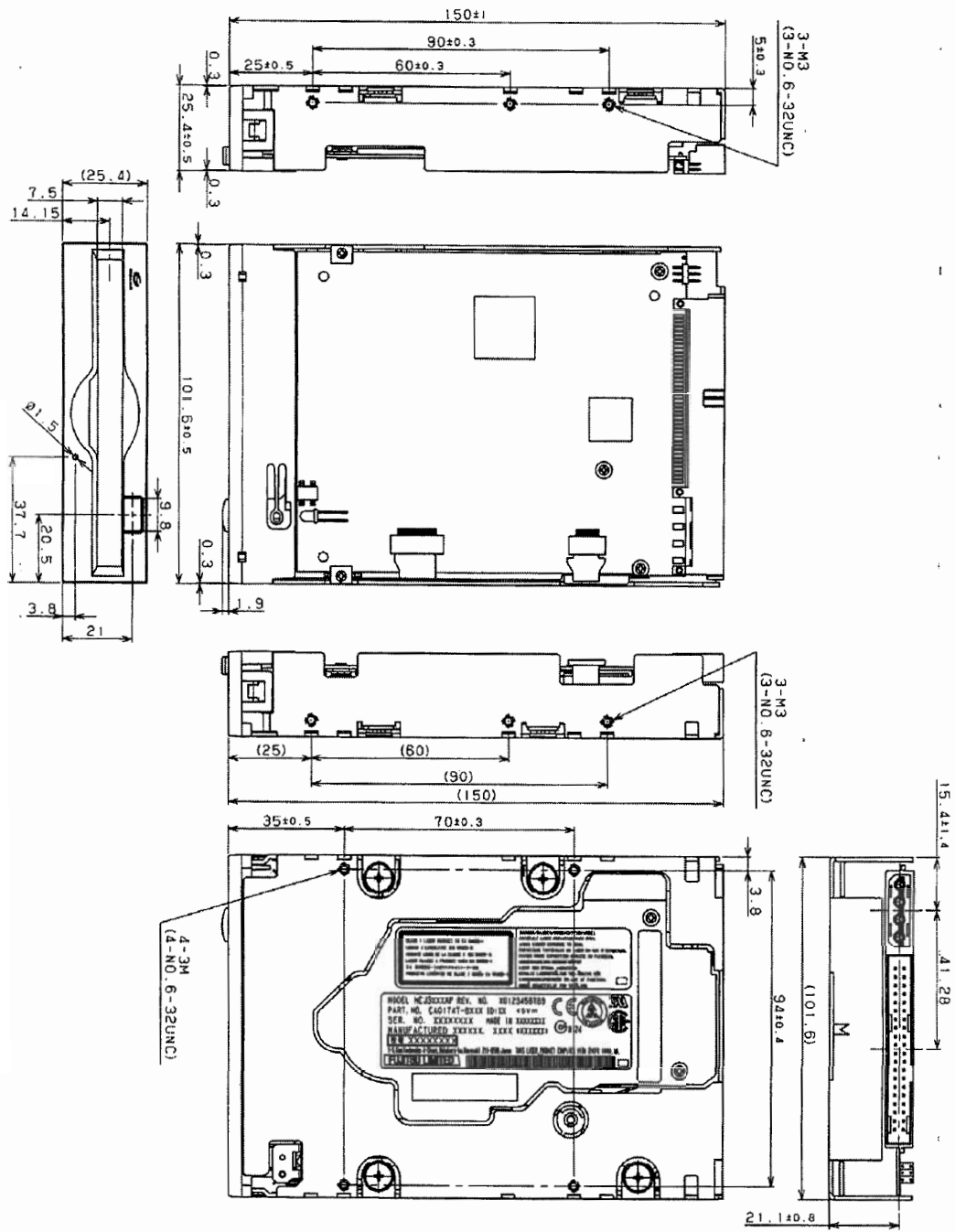


## **3.2 Mounting Requirements**

### **3.2.1 External dimensions**

Figures 3.2 to 3.3 show the dimensions of the drive and the positions of the mounting holes.

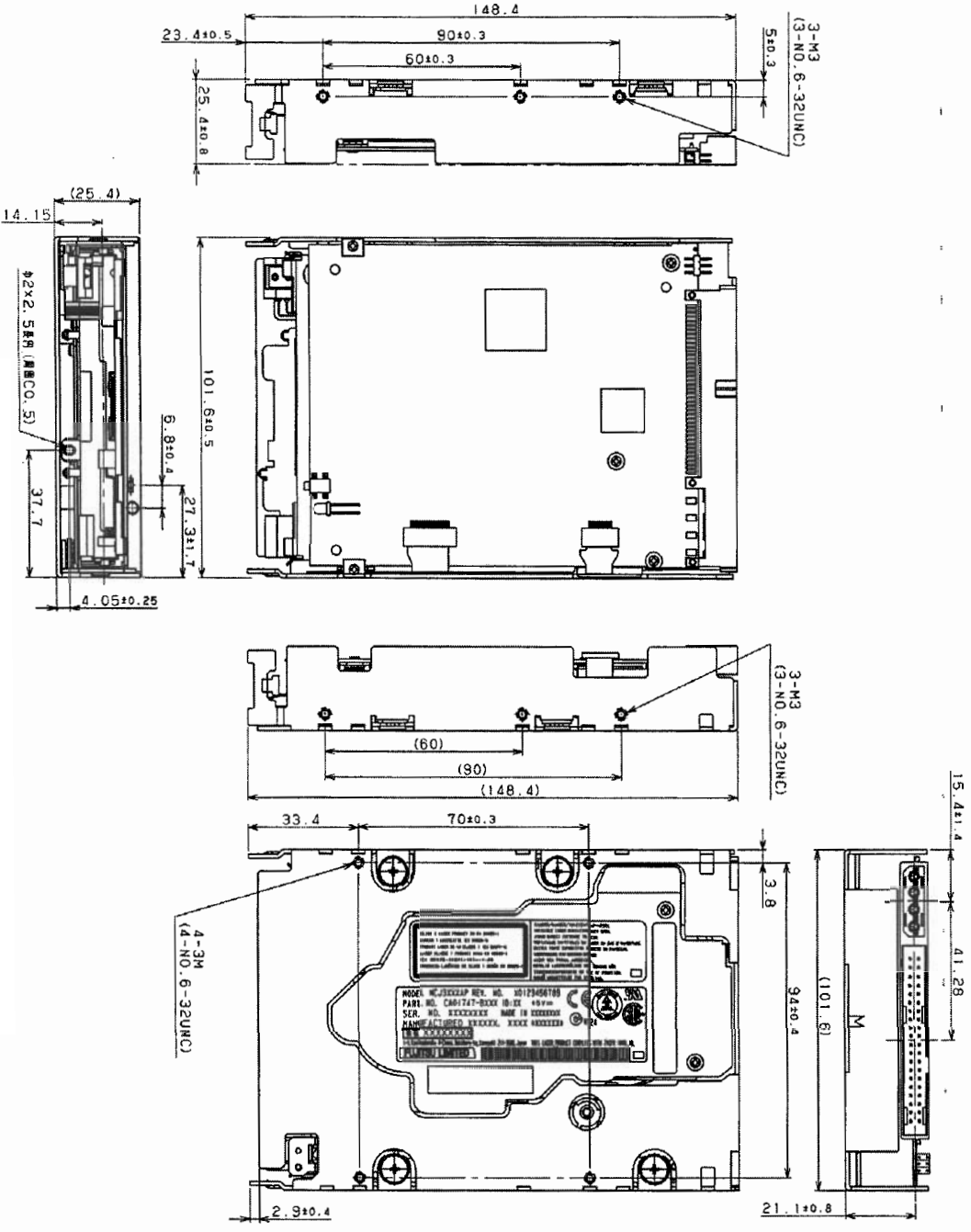
Installation Requirements



Unit: mm

Figure 3.2 Dimensions

3.2 Mounting Requirements

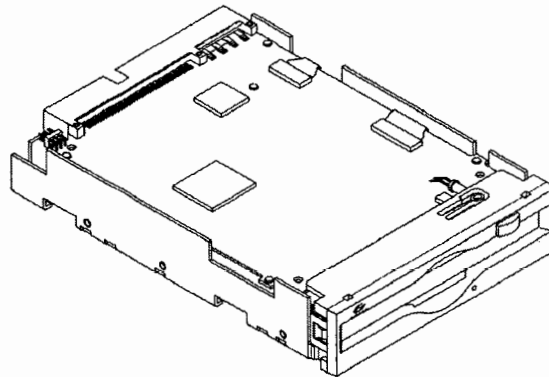


Unit: mm

Figure 3.3 Dimensions (without panel)

### 3.2.2 Installation direction

Figure 3.4 shows the permissible installation directions for this drive. The mounting angle tolerance must be within -5 to 10 from the horizontal. (-) shows that the insertion faces below.



- Horizontal  
Disk insertion slot      Eject button / Busy LED
- Vertical  
(Two orientations)  
Manual eject hole

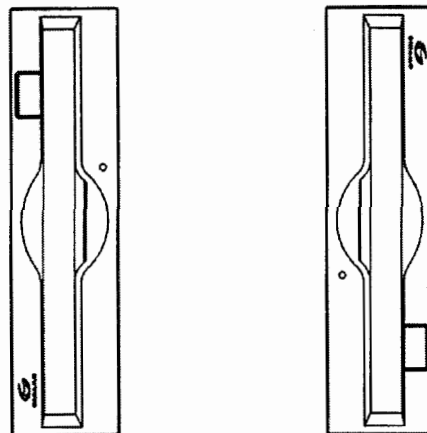
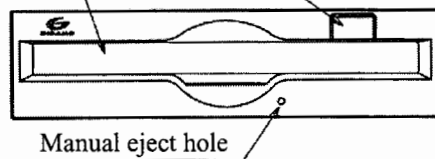


Figure 3.4 Installation directions

3.2.3 Centers of gravity

Figure 3.5 shows the centers of gravity of the drive.

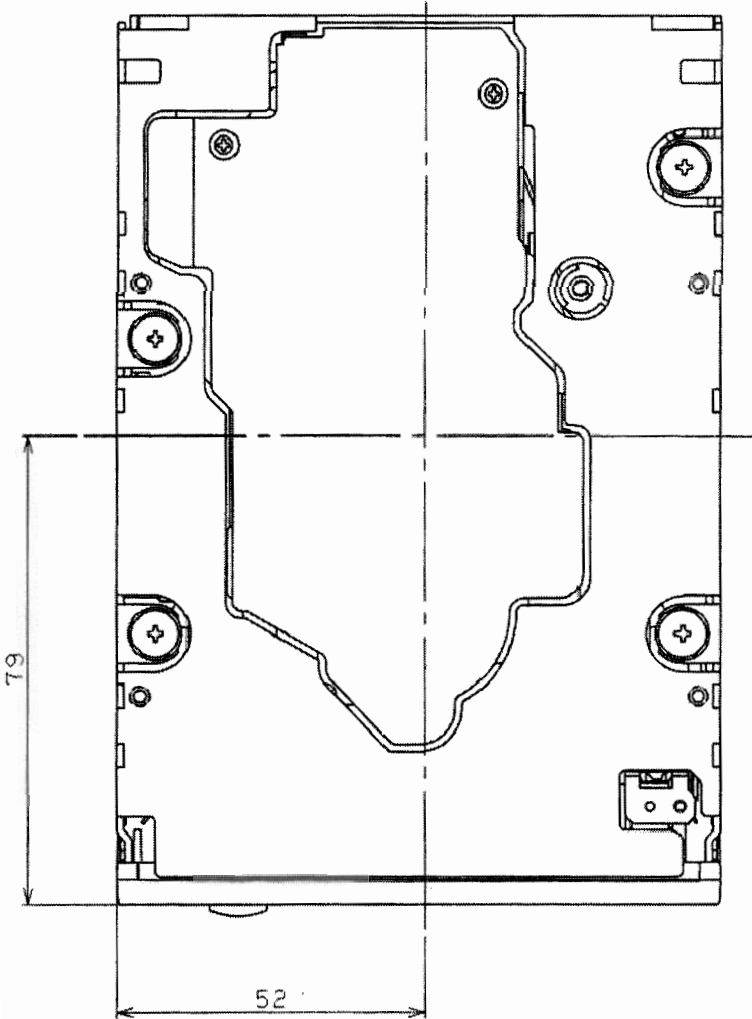


Figure 3.5 Centers of gravity

### 3.2.4 Notes on mounting

(1) Mounting frame structure and clearance

- a) For vibration resistance and heat dissipation, this optical disk drive uses an embossed structure as shown in Figure 3.6, as well as a frame which has a construction similar to other frames which perform the same function.
- b) As shown in Figure 3.6, the inward projection of the mounting screw from the outer surface of the drive frame must not exceed 3 mm.
- c) The clearance between the external surface of the drive frame and the user's frame structure must be at least 1.5 mm.
- d) The clearance between the top and bottom surfaces and the user's frame structure must be at least 1.5 mm.
- e) When mounting the optical disk drive, the screw tightening torque should be 0.4 to 0.45Nm (4 to 4.6kgcm).
- f) When the optical disk drive (with panel) is mounted in a locker, there should be no deformation of the mounting fittings provided and the optical disk drive's panel should not be deformed. If the drive is used with the panel deformed, ejection of the cartridge will be faulty. Check if the door will close from any position whatever when the optical disk drive is installed.

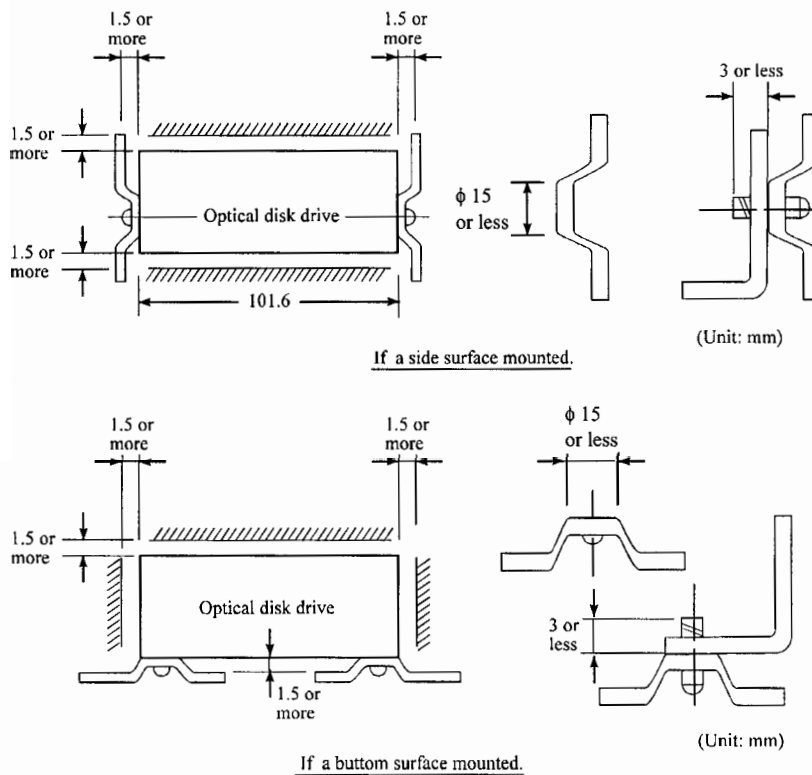


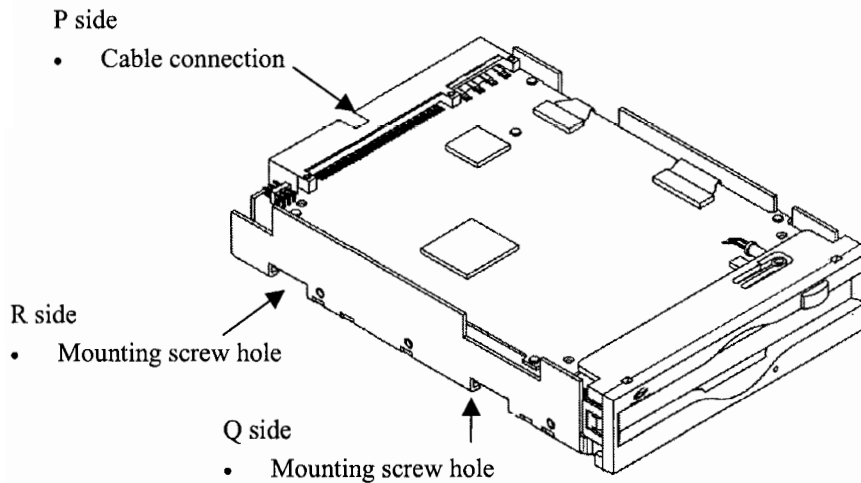
Figure 3.6 Mounting frame structure

## (2) Panel function processing

When installed in a cabinet, do not change the panel format. The processing is installation status and the disk insertion door can be closed from any locations.

## (3) Service clearance

Figure 3.7 shows locations which must be accessed for installation and maintenance. Be sure to leave sufficient service clearance.



**Figure 3.7 Service clearance**

## (4) External magnetic fields

Mount the optical disk drive away from powerful magnetic materials (e.g., a speaker) to avoid influence from magnetic fields.

## (5) Leak magnetic field

The VCM drive magnetic circuit may leak the magnetic field (Maximum 25 mT at distance of 4 mm from the drive).

### IMPORTANT

Do not place a device sensitive to a magnetic field near the optical disk drive.

## (6) External light source

Mount the optical disk drive away from strong light sources (e.g., camera flash).

(7) System ground

The optical disk drive should be grounded to the signal ground (SG) of the power supply of the system. This SG line should be supplied with the system.

The Frame Ground is shorted in the optical disk drive by a metal strip attached to the vibration isolation rubber between the frame (FG) and the base (SG).

**IMPORTANT**

When mounting the optical disk drive in the Device Bay 120mm (5 inch) of the PC chassis, there are two ways of choosing frames the metal frame and the plastic (nonconductive material) frame.

When using a plastic frame, there is not a short circuit between FG of PC and FG of the optical disk drive. As a result, the static electricity tolerance decreases compared with metal frame.

It is recommended to use a metal frame to enhance the static electricity prevention.

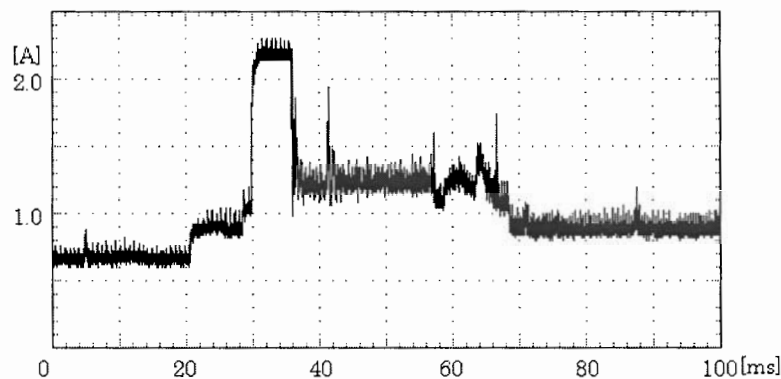
**3.3 Power Supply Requirements**

(1) Allowable input voltage and current

The DC power supply input voltage measured at the power supply connector pin of the optical disk drive (receiving end) must satisfy the requirements in Section 2.1.3.

(2) Current waveform (reference)

Figure 3.8 shows the +5 VDC waveform at seek.



**Figure 3.8 Current waveform (+5 VDC)**