

Selecting power supply

DC 24V BRUSHLESS PULSEROLLER

1 Switching power supply

24 VDC \pm 5%, rating: over 3.2 A
(over 6.4 A for ConveyLinx use)

2 Rectifier power supply

with smoothing capacitor; ripple ratio: 10% max.; rating: over 4.5 A
(over 9.0 A for ConveyLinx use)

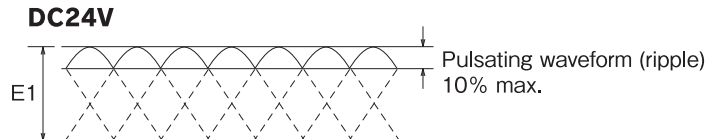
3 24 V battery

rating: over 4.5 A (over 9.0 A for ConveyLinx use) ;
peak current: over 20 A

The use of a commercially available switching power supply (switching method) is recommended as the DV power supply (24 V \pm 5%) for the driver. This switching power supply must have a minimum capacity equivalent to the total of rated current values for the pulse rollers. No transformer type power supplies can be used. Ensure that the power supply voltage is **24 V \pm 5% at the driver's power terminal**. If the capacity of the power supply does not meet the output current value of the drive circuit (rated current \times the number of units), power supply voltage may drop, resulting in a malfunction or damage. Therefore, be sure to use a power supply having a minimum capacity equivalent to the output current value (rated current \times the number of units). The use of this power supply must ensure that the protective device will not be tripped when the peak current of all the drivers is applied for 50 ms.

※Ripple ratio

When alternating current (AC) is rectified into direct current (DC), the ratio of the fluctuations in the AC waveforms, which remain in the DC output waveforms, is called a ripple ratio.



✚ Cable length between power supply and driver card

Use a cable of AWG14 or larger size between the driver and the power supply of 24 VDC and ensure that the distance up to the power supply of 24 VDC is 5 meters maximum.

Any extension of the cable length can cause voltage drop or surge, resulting in a malfunction or a failure. If the cable length must be extended, be sure to make 24 V available at the driver's power terminal.