

Holding Brake Wiring Warning

Servomotor with a holding brake is generally used for vertical load application or when external force must be applied to the shaft to prevent rotation due to gravity or external force. Incorrect wiring or application of abnormal voltage to the servo amplifier output may cause damage to the amplifier and/or the machine. Therefore, care must be exercised when wiring the holding brake circuit. Please observe the following precaution and check the brake circuit wiring carefully.

Caution

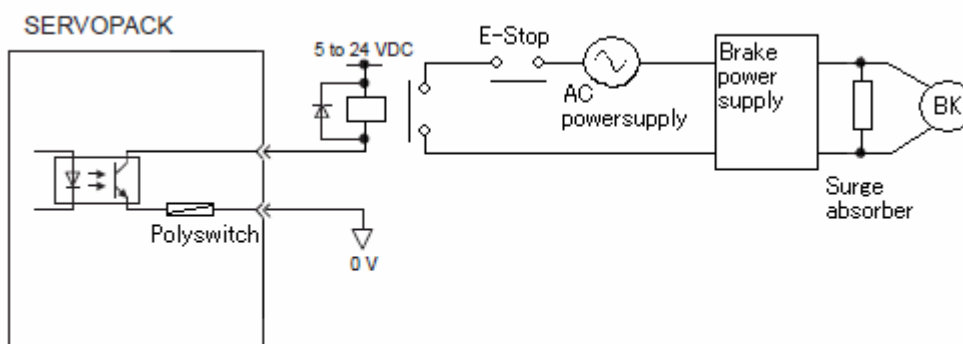
- ✓ **Wrong wiring or abnormal voltage may cause short-circuit failure in the output circuit of the servo amplifier**
- ✓ **Short-circuit failure of the brake signal (/BK) could cause break down of the machine and/or physical injury.**
- ✓ **Check the wiring and perform the trial run with caution especially with vertical load applications,, and be sure to follow appropriate safety procedures**

Addition of an outside interlock:

Safety can be enhanced by addition of an interlock circuit.

Please examine the operation sequence of the emergency stop circuit in accordance with your system requirement. The following is a suggested interlock circuit:

Relay Circuit Example



Note: The maximum allowable voltage and current capacities for photocoupler output circuits are as follows:

- Voltage: 30 VDC
- Current: 50 mA DC

For more information on the holding brake, please refer to Chap. 5.4.4 *Using the Holding Brake* and Chap. 4.2.1 *Servomotors with Brake* in the Sigma II Servo System User's Manual (document # YEA-SIA-S800-32.2).