

# 11. OPTIONS

The following options are available for the EK/EW-*i* series:

- OP-04 Comparator relay output and buzzer
- OP-07 Underhook assembly for the EK-6000*i*, EK-12K*i*, EK-4100*i*, EK-6100*i* and EW-12K*i*
- OP-09 Rechargeable battery pack (Ni-MH)
- OP-12 Carrying case

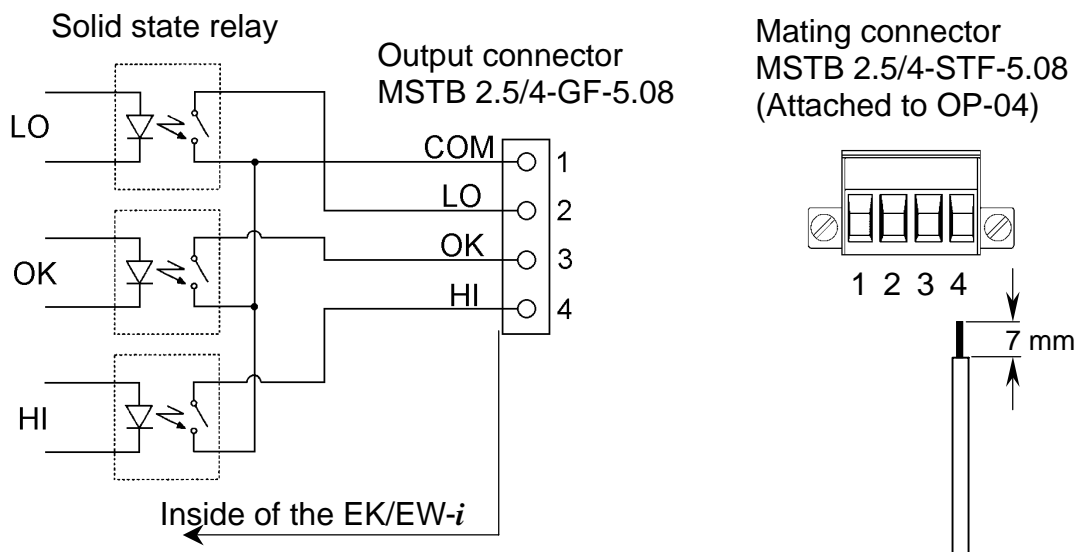
## 11-1. OP-04 Comparator relay output and buzzer

Allows output of the HI, OK or LO signal results to an external device as a solid state relay output.

It is possible to sound a buzzer according to the comparison result. See the function "bEP" to set which result will make a buzzer sound.

- The comparator function on/off, the comparison mode and comparator buzzer output can be selected using the function settings. See the settings "cP" and "bEP".**
- OP-04 cannot be used together with OP-09.**

### Output circuit



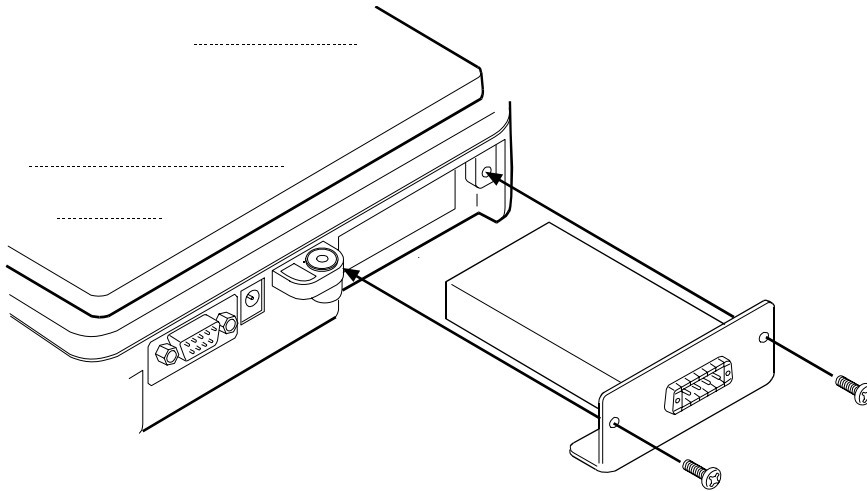
### Maximum rating

The maximum rating of the relay output is as follows.

- Maximum voltage: 50V DC
- Maximum current: 100mA DC
- Maximum ON resistance: 8Ω

## OP-04 Installation

1. Remove the cover of the option slot on the rear of balance by pressing and lowering it down.
2. Insert the option into the slot and secure it with the screws attached.



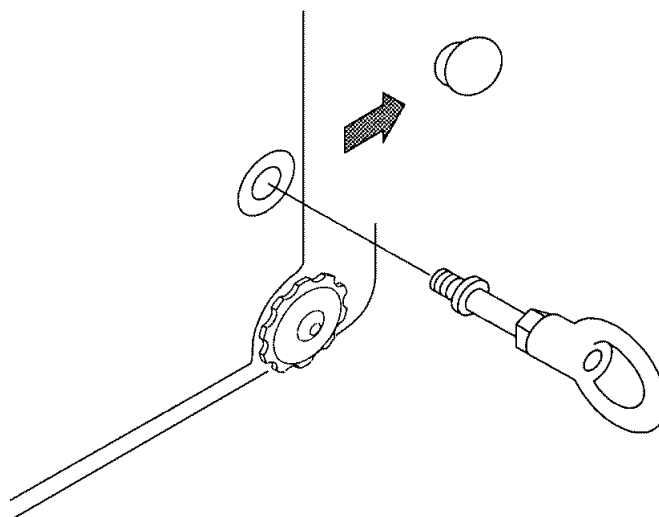
## 11-2. OP-07 Underhook assembly

By attaching the underhook assembly to the bottom of the balance, large objects that are difficult to load on the weighing pan can be weighed in suspension, and the specific gravity of objects may be measured.

- ❑ *OP-07 is available for use with the EK-6000i / 12Ki / 4100i / 6100i and EW-12Ki balances only.*
- ❑ *The calibration with a weight being hung on the hook is required for an accurate weighing.*

## OP-07 Installation

Remove the cover on the bottom of the balance, and screw the underhook assembly into the mounting hole.



### 11-3. OP-09 Rechargeable battery pack (Ni-MH)

By installing the rechargeable battery pack (Ni-MH) into the balance, cordless operation can be carried out for approximately 9 hours (used with the LCD backlight off).

- ❑ OP-09 cannot be used together with OP-04.***
- ❑ The battery life will vary depending on how the balance is used, ambient temperature and so on.***

#### Charging the battery pack

Connect the AC adapter to the balance and turn the power off, then charging starts. It will take approximately 15 hours to reach full charge.

- ❑ If “Lb0” is displayed when using the battery pack, immediately stop using it, and recharge the battery pack or use the AC adapter.***
- ❑ Charge the battery pack at a temperature between 0°C (32°F) and 40°C (104°F).***
- ❑ Do not charge too long. Overcharging will reduce the life of the batteries.***
- ❑ Be sure to charge the battery pack when using for the first time or if it has not been used for a long time (more than one month). Recharging two or three times may be needed to reach full charge.***
- ❑ Be sure to use only the AC adapter that is provided with the EK/EW-i balance.***

#### OP-09 Installation

See the OP-04 installation.

### 11-4. OP-12 Carrying case

OP-12 is available for the convenience of carrying the balance by hand. However, note that because these balances are precision equipment, they will not be able to withstand excessive shock, such as being dropped.