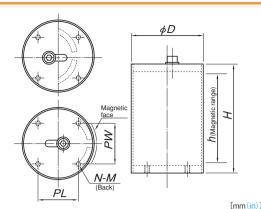
# Model KF-HC POWERFUL ROUND FLOATER\*







KF-HC1218

Designed for separation of irregularly shaped workpieces (steel plates) that do not have a straight part of sufficient length.

#### [Features]

- The magnetic force can be adjusted by changing the internal magnet position.
- Small but powerful.

#### Dimensions Model Mass PLM 8(0.31), Depth 10(0.39 130.0 Approx. 2kg/ KF-HC0813 M 8(0.31) 114.3 175.0 140 65 65 Approx. 7kg/ KF-HC1218 M10(0.39), Depth 15(0.59 235.0 Approx. 14kg/ KF-HC1424

## PERMANENT ELECTROMAGNETIC FLOATER\* Model KF-O



# Permanent electromagnetic type introduced to FLOATER Series!

Patented

## [Application]

Most suitable for remote control of ON and OFF of separation of steel plates. [Features]

- Compared with the electromagnetic type, this type has a wider magnetic force effective width.
- Compared with the permanent magnetic cylinder changeover type that can be controlled remotely, this type requires much less space.
- ■Compared with the electromagnetic type, this type consumes less electricity since electricity is supplied momentarily only for ON/OFF operation.

# A special size is available also.

| Model  | Dimensions                        | Source<br>Capacity | Mass         | Applicable Rectifier |
|--------|-----------------------------------|--------------------|--------------|----------------------|
| KF-Q10 | W159(6.25) ×D64(2.51) ×H144(5.66) | 1.5kVA             | 10kg/22.0 lb | *KFQR-260A           |

When the magnetization operation or demagnetization operation is performed five times successively per minute on the control unit, the unit will be brought into an alarm state and will not accept further operation for safety. To reset the alarm state, turn off the source power once and then turn it on again.

# An example of usage

## (1) < Delivery of large steel plates>

Stand large plates vertically against a wall, etc. This way, you can make good use of the separating force since part of the separating force required to support the weight of plates can be reduced.

# (2) <Separation of closely stuck plates>

Large steel plates and plates that are stuck closely by oil or grease can be separated effectively by using several units of the Floater coupled.

## (3) <Separation of plates stacked high>

When steel plates are stacked high, mount the Floater on a lilfter. (The suitable height of the Floater is slightly higher than the top of plates.>

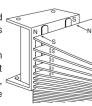
# ■Principle of the Floater

The Floater induces the same type of magnetic poles in steel plates stacked opposing the magnetic pole face to separate the plates by the repelling force of the same poles.

## ■Floating distance

When a pair of Floaters are positioned on each side of stacked  $\leqslant$ plates in the longitudinal direction, the distance the top plate is floated from the second one is as shown in the table.

This distance applies when the Floater is positioned 50 mm away from the edge of plates and the initial position of the first plate is 50 mm below the top end of the Floater. Note, however, < that if plates are warped or oil is sticking to them, the distance will become shorter.



| (1) Floater      | (2) | (3)             | Floater lifter |
|------------------|-----|-----------------|----------------|
| Steel plates     |     |                 |                |
| Wall or supporte | r   | Steel<br>plate: | s              |

|                     |                  |                  |                  |                  | [mm (in)]               |  |
|---------------------|------------------|------------------|------------------|------------------|-------------------------|--|
| Test Plate<br>Model | Thickness<br>1.0 | Thickness<br>1.6 | Thickness<br>2.0 | Thickness<br>3.2 | Size                    |  |
| KF-5B               | 18(0.70)         | 14(0.55)         | 10 (0.39)        | 5(0.19)          | 150 (5.90) × 450 (17.7) |  |
| KF-10               | 14(0.55)         | 12(0.47)         | 6 (0.23)         | -                |                         |  |
| KF-20               | 26(1.02)         | 17(0.66)         | 9 (0.35)         | _                |                         |  |
| KF-30               | 33 (1.29)        | 26(1.02)         | 18(0.70)         | 7(0.27)          |                         |  |
| KF-40               | 34(1.33)         | 28(1.10)         | 20 (0.78)        | 10(0.39)         |                         |  |
| KF-T5A              | 5(0.19)          | 3(0.11)          | 2(0.07)          | _                | 80 (3.15) ×200 (7.87)   |  |
| KF-T10              | 12(0.47)         | 0.47) 10(0.39)   | 9 (0.35)         | 6(0.23)          | 160 (6.29) ×300 (11.8)  |  |
| KF-T20              | 12(0.47)         |                  |                  |                  |                         |  |
| KF-S type           | 14 (0.55)        | _                | 10.5(0.41)       | _                | 200 (7.87) × 400 (15.7) |  |