

# DAEHAN SENSOR



RadioFrequency Type Level Sensor  
with level switch

DRF – Series

Level Switch with Contact – Output

Product Name

DRF – 200F



ISO 9001 인증업체

---

1993 DAEHAN SENSOR CO., LTD.  
All rights reserved

# Table of Contents

1. Introduction .....	3
2. Features .....	3
3. Specification .....	3
4. Installation .....	4
5. Calibration & Setting .....	4
6. Wiring Connection .....	5
7. Check Point Before A/S .....	6

## SPECIFICATIONS

Media : Powder, Solid, Liquid

Wiring : Input - 2 wire (AC 220V)  
Output - Max. 3wire (SPDT)

Input Voltage : AC 220V

Output Signal : N/O, N/C

Temperature :  $-20^{\circ}\text{C} \sim 80^{\circ}\text{C}$

Pressure :  $10\text{Kg}/\text{cm}^2$

Waterproff / Dustproof : IP65

Material : Head Housing - Aluminum

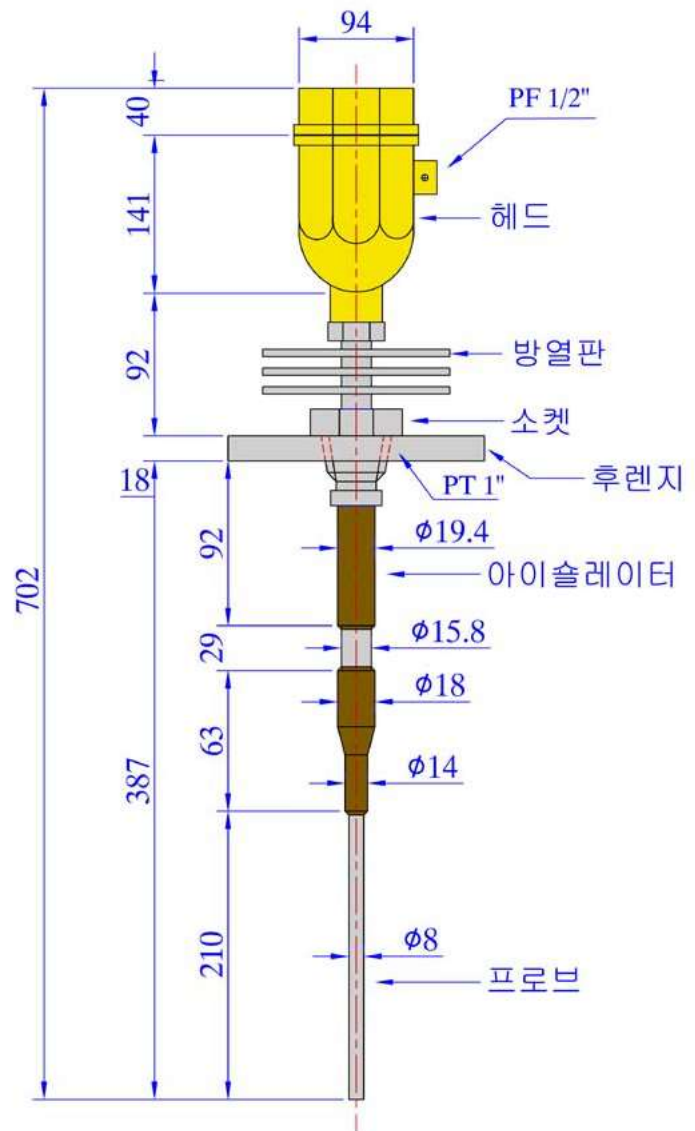
Flange - SUS 304  
(Option - SUS316)

Socket - SUS304  
(Option - SUS316)

Heatsink - Aluminum

Insulator - P.P.S

Probe - SUS304  
(Option - SUS316)



## Introduction

This is a sensor which detects a frequency-converted value according to the resistance of various types of test substance.

The capacitance value sensed frequency signal may be output as relay contacts after electrically converted from the Main Unit.

## Features

This sensor is widely used for the alarm of level in the tank of powder, solid and liquid. Mainly grains and Food / Beverage tank.

The level switch is widely used to handle because it is simple and easy to install and manage.

### © Cautions ©

Check the suitability between sensor specification and where to install.

Suggest to use a protection pipe when suspended solid exist in the tank.

Should not use for a liquid adhesive.

Be cautions not to bend sensor.

Do not impact on Sensor.

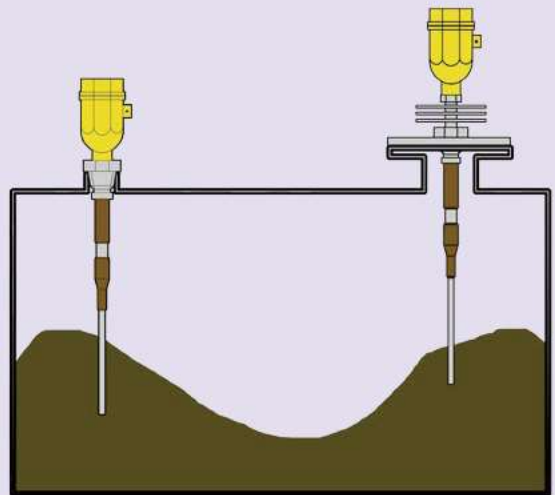
## Installation

As shown in the picture, it is installed and using.

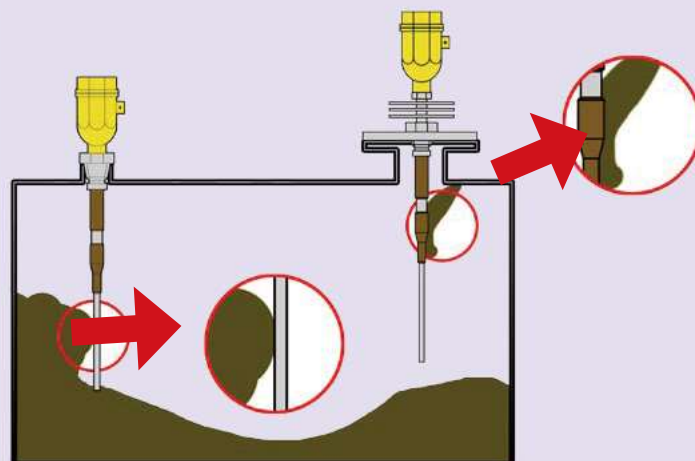
Check if the flanges specification(or socket) match between tank and product.

Insert a probe into the tank. Connect wiring between sensor contact Terminals & controller, between tank and product. Insert a probe into the tank.

Connect wiring between sensor contact terminals and controller.

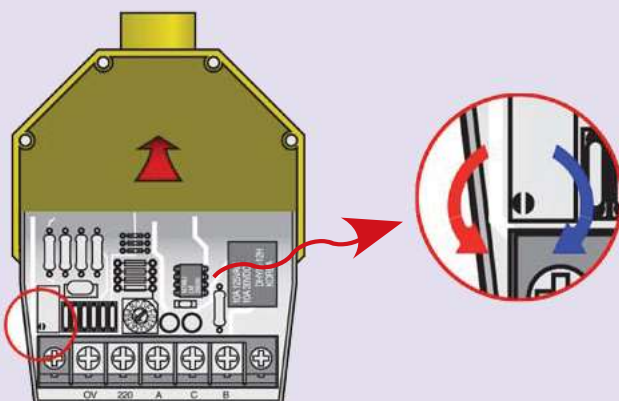


## © Installation Caution ©



You should pay attention to the phenomenon when using for adhesive liquid, as shown in the picture. A malfunction is caused by the liquid attached to the sensing part.

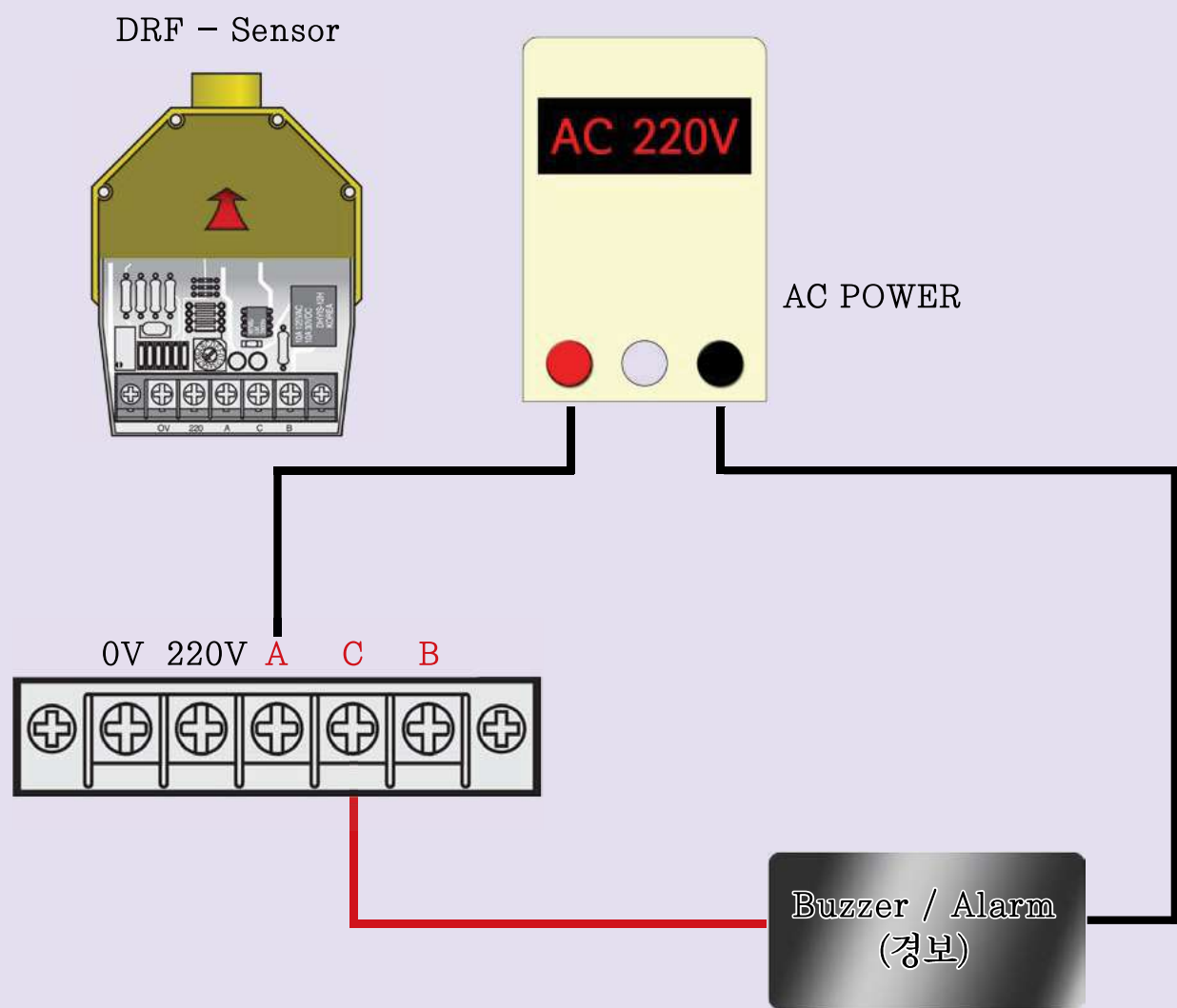
## Calibration



As shown in the picture, when it rotates in a clockwise direction, the range of sensitivity increases, when it rotates in a counter clockwise direction, the range of sensitivity is reduced.

Wiring Connection

Wiring to a Sequential Control



## Check & A/S

The input voltage is normal?

: Check if the input of AC 220V/110V, is normally supplying.

The wiring is correct?

: Check the connect the wire short-circuit and / or poor contact.

The state of sensor is normal?

: Check if water or liquid exists inside of the sensor.

Head Office

94-2, Yongdap-dong, Seongdong-gu, Seoul, Korea

R&D Office

2-71, Jeonong-dong, Dongdaemun-gu, Seoul, Korea

Tel : 02-2213-9888(代) Fax : 02-2245-3482

e.mail : master@dh34.com Domain : www.dh34.com