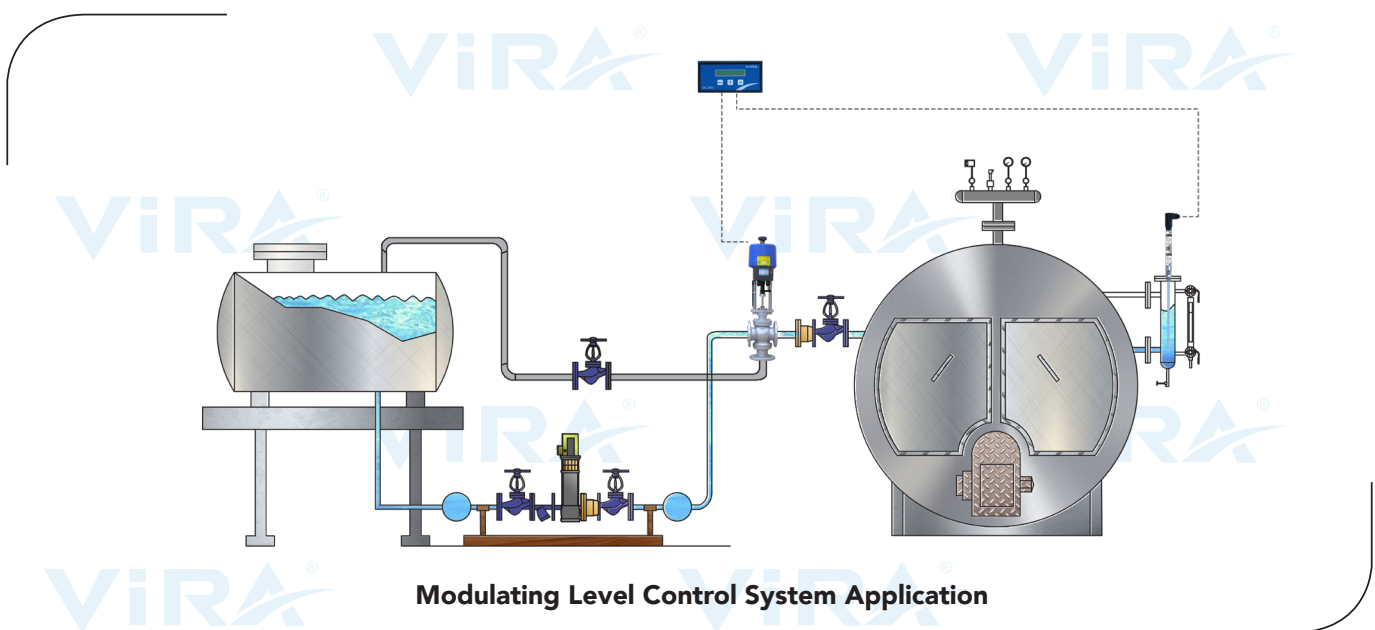


MODULATING LEVEL CONTROL SYSTEM

Modulating level control system consists of a capacitive probe, a controller and a 2 or 3-way valve. The water level, which varies with the phase change of the water in the boiler, is determined by the capacitive level probe and is continuously compared with the previously set value by the level controller. In any determined deviation, it sends a signal to the feedwater valve in order to take the required feedwater amount into the boiler.

The probe used in the modulating level control system works according to the capacitance principle. Capacitance value is measured according to the amount of water. The controller opens and closes the proportional control valve through signals from the capacitive probe and the water level is kept at the desired level. Thus, the flow rate and pressure of the steam obtained are constant. It also has a low moisture content.



Note: The control valve may either be a 2-way or 3-way valve according to the user's application.

For a safe operation, all steam boilers should have low and high level alarm systems. Additional high and low level alarms can be received from the modulating level control system.

Modulating level control and alarm system can be used;

- Boilers with a capacity higher than 5.000 kg / h
- Where steam load and pressure are critical

SK 3000

Modulating Level Control System

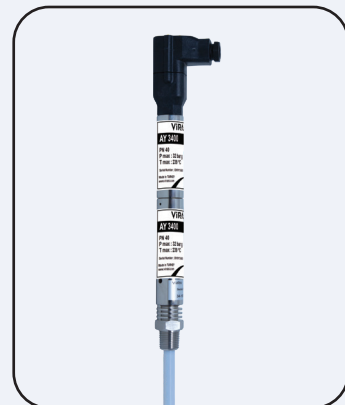
Modulating Level Control System

- Type** : SK 3400
- Mains Supply** : 230 VAC (+5% / -10%) 50/60Hz
- Enclosure** : Panel Mounting
- Function** : Modulating Level Control, High Alarm, Low Alarm
- Output** : 4-20 mA Output, Low Alarm Relay, High Alarm Relay, Valve Control Relay
- Max. Ambient Temp.** : 55 °C

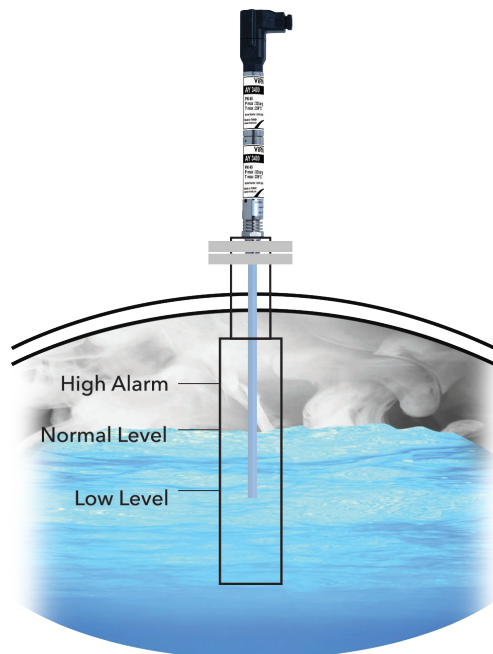


Modulating Level Control Probe

- Type** : SD 3400
- Nominal Pressure** : PN 40
- Max. Operat. Temp.** : 239 °C
- Max. Operat. Press.** : 32 Bar g
- Connection** : 1/2" BSP Screwed
- Length** : 300 - 1500 mm
(The length must be specified in the order.)
- Max. Ambient Temp.** : 70 °C



Application Example



SKV 3400

Modulating Level Control Valves

Modulating Level Control Valve 2-Way

| | |
|-----------------------------|--|
| Type | : SKV 3400 - 2 |
| Enclosure | : IP 65 |
| Sizes | : DN 15 to DN 300 |
| Max. Operating Temp. | : 220 - 250 °C |
| Mains Supply | : 230 VAC (+5% / -10%) 50/60Hz |
| Max. Ambient Temp. | : 60 °C (Actuator) |
| Control Mode | : Floating Control |
| Pressure Class | : PN 16 - 25 - 40 ANSI 150 and ANSI 300 |



Modulating Level Control Valve 3-Way

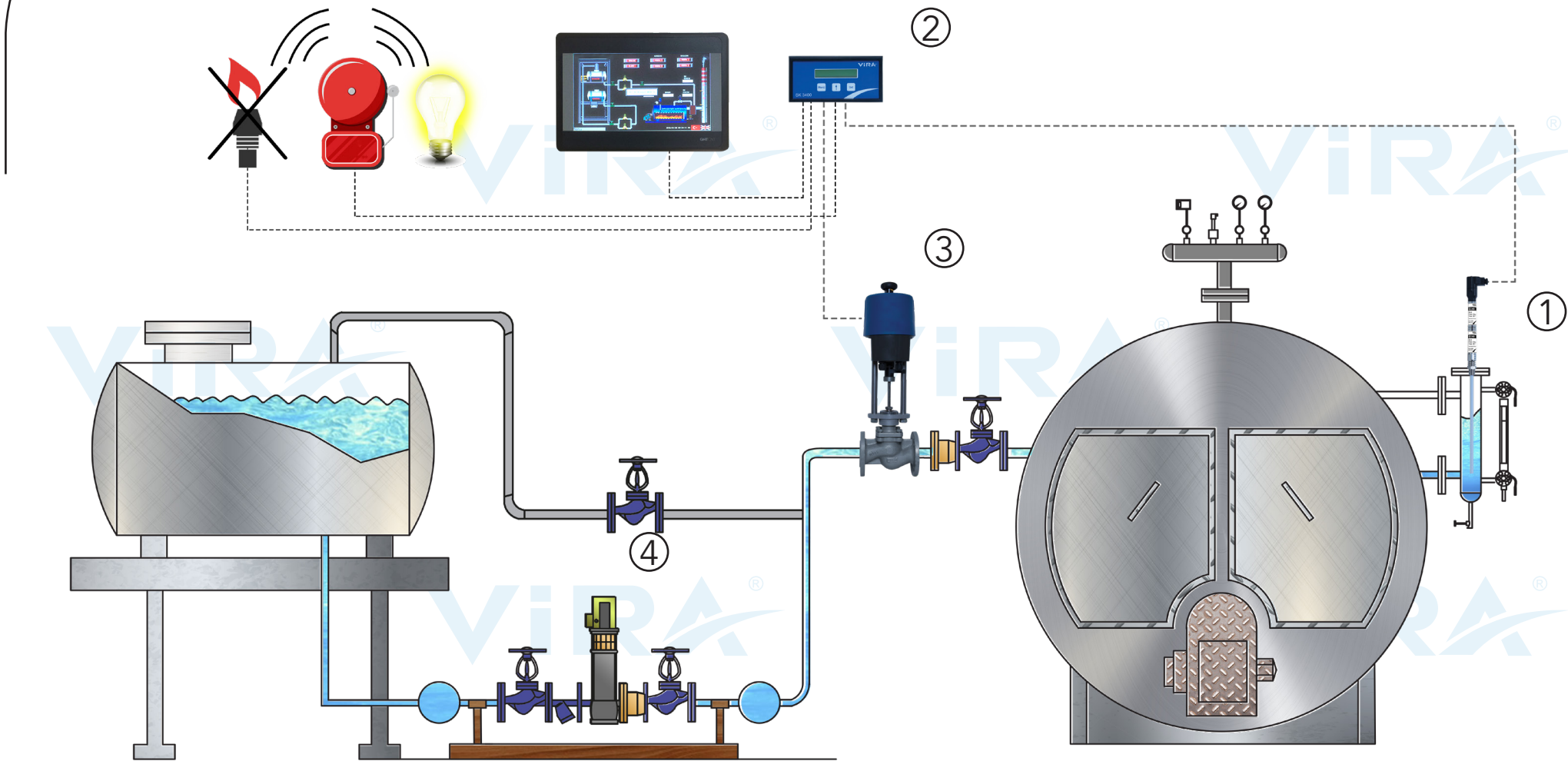
| | |
|-----------------------------|--|
| Type | : SKV 3400 - 3 |
| Enclosure | : IP 65 |
| Sizes | : DN 15 to DN 300 |
| Max. Operating Temp. | : 220 - 250 °C |
| Mains Supply | : 230 VAC (+5% / -10%) 50/60Hz |
| Max. Ambient Temp. | : 60 °C (Actuator) |
| Control Mode | : Floating Control |
| Pressure Class | : PN 16 - 25 - 40 ANSI 150 and ANSI 300 |



Advantages

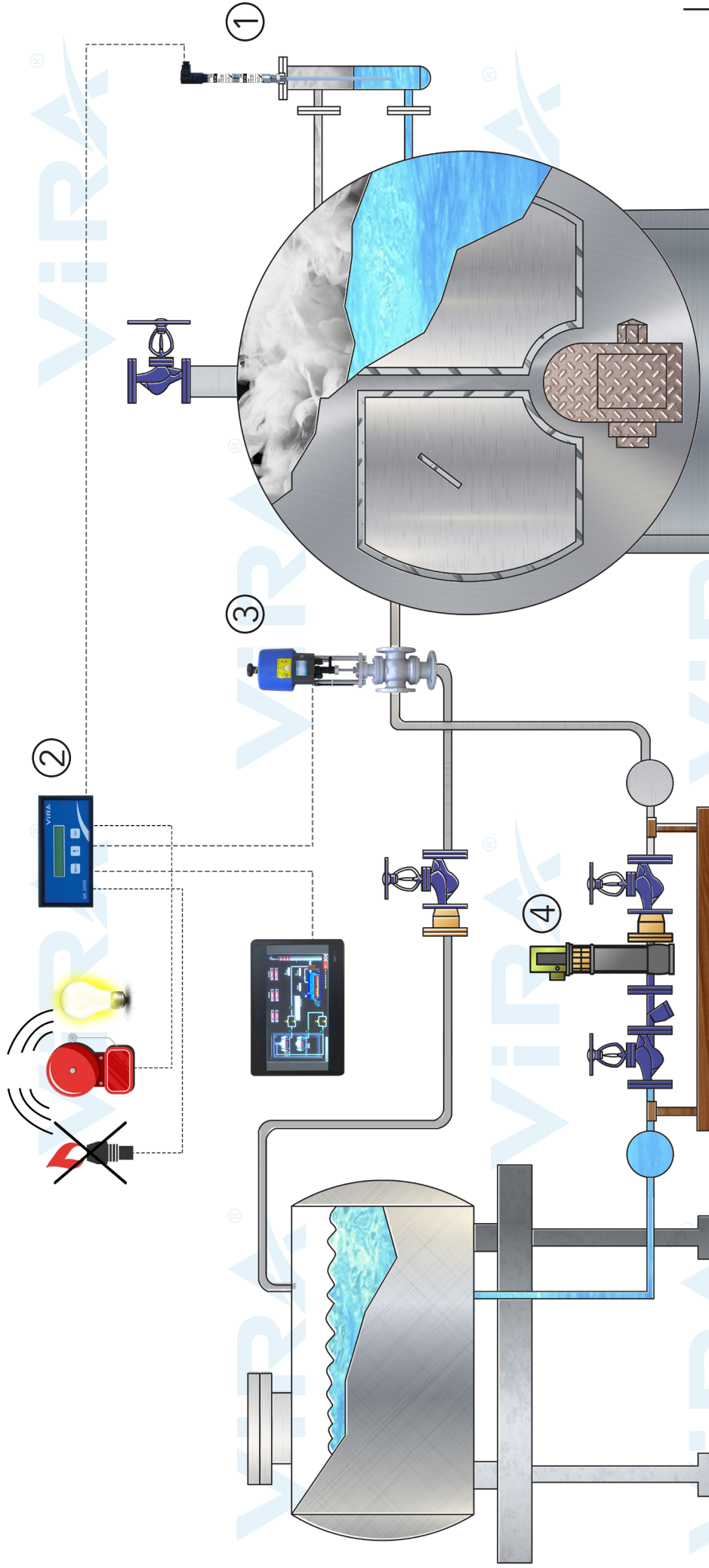
- Constant steam flow and pressure
- Low moisture content steam
- Low thermal stress on boiler surfaces
- Long lifetime for pumps and burners

SK 3000 2-Way Modulating Level Control and Alarm System



1- Capacitive Level Probe 2- Level Controller 3- 2 Way Level Control Valve 4- Feedwater Pump

SK 3000 3-Way Modulating Level Control and Alarm System



- 1- Capacitive Level Probe
- 2- Level Controller
- 3- 3 Way Level Control Valve
- 4- Feedwater Pump