

# CONTINUOUS FEED WATER CONTROL ENV

## FUNCTION

ERAB's continuous feed water control consists of a pulse regulator module ENV, 1 control valve with an electrical motor actuator and 2 electrodes.

The feedwater quantity to the steam boiler is regulated through the motor valve, that from the step-regulator receive control impulses.

The step-regulator receive the level changes from the two electrodes which measure the water level by conductivity measuring.

When the water level is between the two electrodes, the step-regulator does not send impulses to the motor valve, which is in a balance position, and the feedwater through the motor valve will correspond to the present steam production.

By increased or diminished steam production, the water level in the boiler either goes up or down. The electrodes registered the level change and regulating impulses from the step-regulator are generated. When the water level is back between the two electrodes, the motor valve has found a new balance position corresponding to the new steam production.

## ELECTRODES

The electrodes should be placed outside the boiler drum into a separate water column. Electrode type ENT120 or SME 32.2 could be used. The electrode are supplied with a flange connection DN50 or DN65 - PN40. The electrodes must be vertical installed in the water column. The electrode length is adjusted according to the normal water level in the boiler drum. The difference between the two electrodes is approx. 15mm.

## MODULE ENV

The Step-regulator module ENV has plug-in connection, and can be delivered for panel mounting.

The regulator has test buttons and LED indication. Regulation adjustment: "D" function delay, "P" first pulse, "I" integral pulses, and "T" tendency pulse.

## MOTOR CONTROL VALVE

Motor valve type MV5211 and MV5311 has flange connection according to DIN 2635 in dimension DN15 - DN100 PN16 - PN64.

The electrical motor actuator can be delivered with an extra limit switch, feedback potentiometer or 4...20mA feedback signal.

