

## Electronic remote water level gauge type

### PE2-xx

with evaluating device ERW lcd 2.0

#### Application and function

The electronic remote water level gauge type PE2-xx / ERW lcd 2.0 can be used for steam boilers.

The conductive measuring principle is used to detect the water level height. Special processors evaluate the conductivity detected by the probes. The electronic processing is made in digital technology. The data are transmitted to the evaluating device by a 2-wire bus according to RS485. The water level can be indicated both graphically and numerically on the illuminated LCD of the evaluating device ERW lcd 2.0. The following numerical indications can be selected:

„percent, millimetre, litre, tons“ etc.

Four relays functions as limit switches with separate switch points.

Two additional special relays work together as SMC-limit switch, which behaves as low water level switch. Further indicating instruments can be connected by two 4-20mA interfaces.

The probe distribution on the standpipe can also be made in irregular gaps by the desired measuring range depending on the customer's demand.

The basic settings are carried out in our factory. Modifications / corrections can be programmed with the setting assistance.

The settings can be changed by the 6 keys on the evaluating device. The setting assistance can be selected in the following languages:

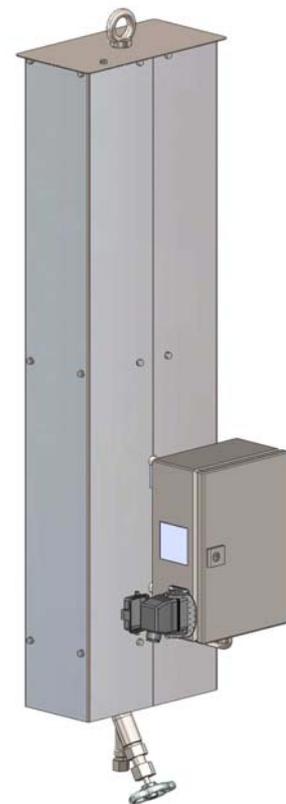
„German, English, French or Spanish“.

The product corresponds to the PED directive 97/23/EEC art. 3 par. 3 SEP (Sound Engineering Practice).

Applied rules as per TRD/AD2000 or ASME-Boilers.

#### Technical basic equipment

- Materials according DIN or ASME
- Process connection according DIN or ASME, flanges or welding end
- 4-28 probes, standard 12 probes
- Illuminated LCD, digital display, current water level is indicated in percent, in absolute or relative numbers.
- ERW supports two separate 4-20mA interfaces for loads up to 500 Ohm
- 4 adjustable switch points and 1 additional fail-safe switch point



**Technical data**

Allowable pressure	PS [bar]	32	50	80	100	160	200
Allowable temperature	TS [° C]	239	265	296	312	348	367
Porbe	Type	EL65		EL60			
	Article-no.	15-01877		15-00790			
	Isolator	PTFE		Cerramic			

**ERW lcd 2.0**

Article-no.	15-090060
Power supply	24Vdc / 1,25 A by separate power supply unit
Interfaces	RS232C (D-Sub 9)
	RS485 (6-port plug)
	Limit switch 12-port plug
	4-20 mA
Version case	According to DIN 43700 / IEC 61554
Material	Aluminium, inside conductive with olive drap colour
Protection	Front side IP40
Connection	From the back side with terminals up to 2,5 mm <sup>2</sup>
Operating temperature	0 bis +55 ° C

**Probe**

Male thread	G ½
Wrench opening	SW27
Material screw connection	Stainless steel
Material probe tip	Stainless steel
Probe distance	Minimum 36 mm for staggered fixation
Interfaces	RS485 (6-port plug)

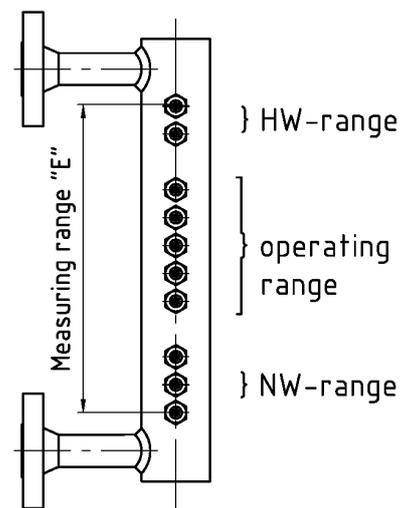
**Limit data of potential-free contacts**

Safety chain	Voltage	max. 250Vac
	Current on contact	max. 3 A ohmic
		max. 0,75 A inductive $\cos \varphi 0,5$
Additional report	Voltage	max. 250Vac
	Current contact	max. 3 A ohmic
		max. 0,75 A inductive $\cos \varphi 0,5$

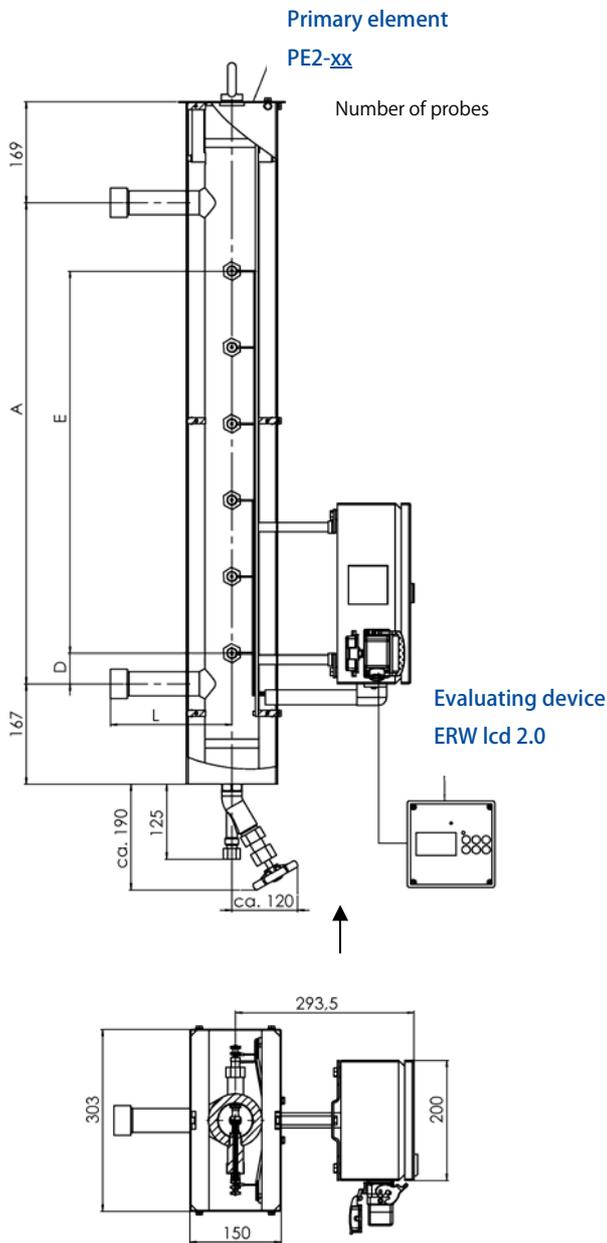
**Available (optional) versions**

- Light instrument LB16
- Protection housing IP65 for installation of ERW lcd2.0 and LB16

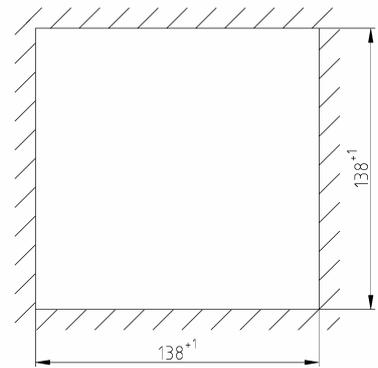
Probe EL60



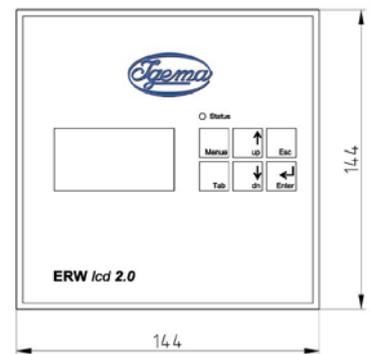
Dimensions



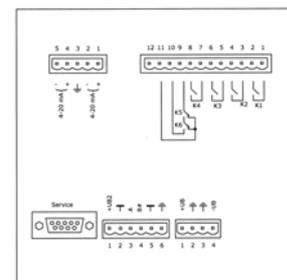
Switch panel cut-out



Front view



Back view ERW lcd 2.0



Top view

Information:

Max. length of cable between ERW and LB16  
**100 m**, if length is more than 100 m an additional signal amplifier should be used

