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# MOSTEC

## pH/mV-controller Type M8832N



### Technical description

The type M8832N controller is suitable for pH control systems and for redox titrations with known end point potential.

Typical applications include waste water neutralization, redox control, bio-reactor control and chemical processes in continuous or batch-type operating modes.

Even processes with highly non-linear titration curves can be controlled with the M8832N, thus making it always possible to set up control systems that work in a stable manner. The quasi-steady working principle of the three-point controller

eliminates the need for using proportional valves when adding reagents; two-position or open/close valves are sufficient.

As a result, the reagent viscosity plays a minor role; if necessary, pneumatic or hydraulic valves can be used.

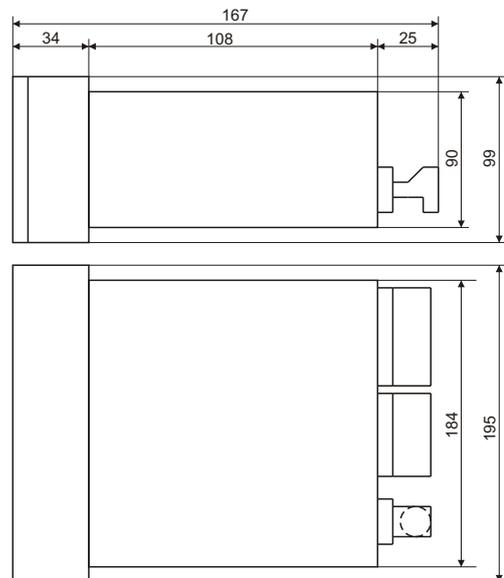
By this way, inexpensive control elements are used and valve adjustments are eliminated.

The actual value, the setpoint and temperature can be easily read from the integrated digital display.

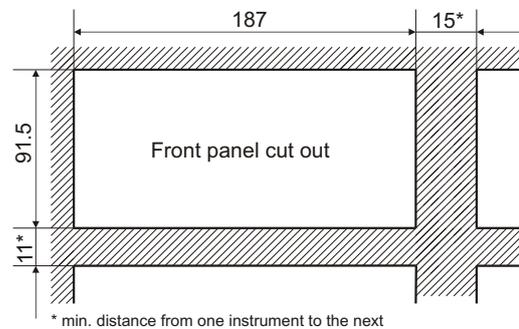
## Technical Data

<b>Controller principle:</b>	Quasi-steady three-point P-controller with preselectable transfer function
<b>Range:</b>	0...±1000mV and 0...14pH
<b>pH zero asymmetry:</b>	±1pH
<b>pH-slope:</b>	50mV/pH to 62mV/pH at 0°C
<b>pH-temp. compensation:</b>	0-100°C or automatic with Pt-100 platinum sensor, 2-conductor design
<b>Temperature display:</b>	1. Manual 0...100.0°C 2. Pt-100 -10...+100.0°C ±1°C
<b>Signal input:</b>	Floating, with isolation amplifier, common mode voltage max. 500VDC
<b>Input impedance:</b>	10 <sup>12</sup> Ω typical
<b>Input bias current:</b>	1pA at 25°C typical
<b>Temperature drift in relation to input:</b>	50μV/°C max.
<b>Operating temperature:</b>	10 to 45°C
<b>Setpoint values:</b>	0...±1000mV or 0...14pH, adjustable with potentiometer and display
<b>Proportional band:</b>	0...1000 mV or 0...7 pH In the P-band = Zero position, the controller works as a two-point switching controller
<b>Dead band:</b>	=10% of P-band
<b>P-band deviation:</b>	±2% of end values
<b>Valve times:</b>	0.5 to 20 or 0.05 to 2.0 seconds in relation to the mid of P-band
<b>Alarm delays:</b>	1-100 minutes or 1-100 seconds, can be switched off
<b>Relay outputs:</b>	(UP) valve: change-over contact 1Amp./230V, resistive load (DOWN) valve: switch-over contact 1Amp./230V, resistive load ALARM: change-over contact 1Amp./230V, resistive load
<b>Current output:</b>	0/4...20 mA for 0...14 or 2...12pH and special ranges. Ri ≥ 1MΩ, max. load 500Ω at 20mA 0/4...20 mA for 0...14 or 2...12pH, load = 51Ω
<b>External setpoint:</b>	115/230V, 50-60Hz, ~10VA approx. 1.4kg or 3Lbs Installation kit, 2 keys and manual
<b>Power supply:</b>	
<b>Weight:</b>	
<b>Accessories:</b>	
<b>Optional equipment:</b>	<ul style="list-style-type: none"> <li>• Leakproof housing</li> <li>• Front panel available in different languages</li> <li>• Other signal outputs</li> <li>• Computer interface RS232C</li> </ul>

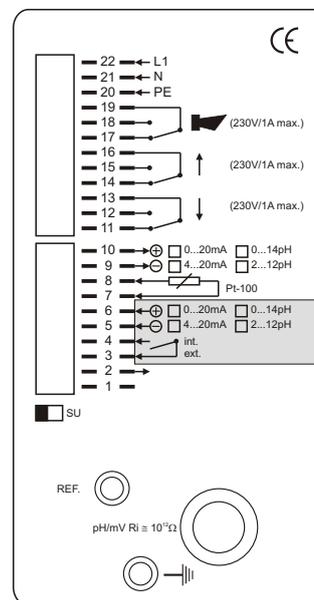
## Dimensions in mm



## Cut out dimensions in mm



## Back panel



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