

# Conductivity Meter Type M9836

available cells:



## Technical description

The M9836 conductivity meter is suitable for water, waste water or pure water conditioning in continuous or batch-type operating modes, for liquid chromatography or for general chemical process monitoring.

The accuracy is better than 0.5% at 2.25%/°C between 15°C and 120°C.

Temperature coefficient of the cell is compensated either manually or automatically by an external Pt-100 platinum resistor probe within the range of 0°C to 120°C. The slope can be adjusted between 1.5%/°C and 3.0%/°C.

Commercially available conductivity cells - K-factor 0.01, 0.1, 1.0 and 10 cover a dynamic

range from 0.01µS to 200mS full scale. An internal synchronous rectifier eliminates the capacitive error currents induced by the cell cable.

The measuring signal is transferred to the output as a signal current of either 0...20mA or 4...20mA. Two floating limit or alarm contacts can be set over the entire range. Each can be defined as a normally open or as a normally closed contact.

Supply lines and all other lines, either from or to the conductivity meter, are protected by internal noise limiters against HF-noise.



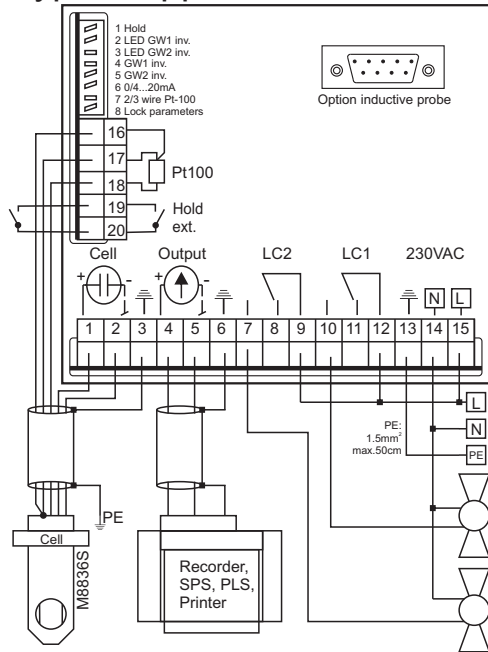
2 alarm contacts

temperature compensated

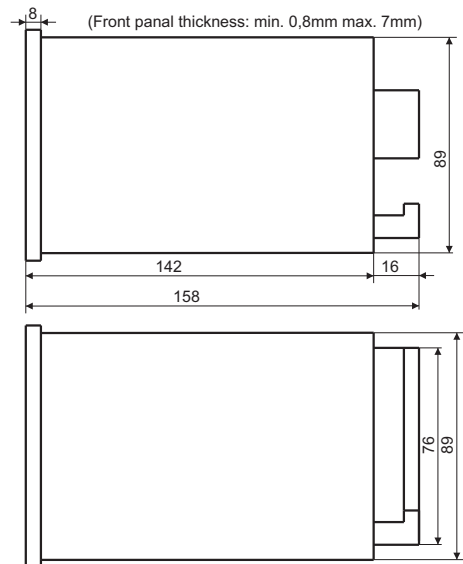
## Technical Data:

Measuring ranges:	0...2.000 S	K=0.1, K=0.01
	0...20.00 S	K=1.0, K=0.1, K=0.01
	0...200.0 S	K=1.0, K=0.1, K=0.01
	0...2.000mS	K=1.0, K=0.1, inductive cell
	0...20.00mS	K=1.0, inductive cell
	0...200.0mS	K=10, inductive cell
	0...2.000S	inductive cell
Range indicators:	3 green lamps	
Display:	Red LED-display 3½-digit, character high 12.7mm	
Accuracy:	0.5%	
Measuring frequency:	80Hz...10kHz	
Measuring amplitude:	70mV and 150mV, conductive cell only	
Step response:	Time between a conductivity change from 0% to 100% or reverse, measured between 10% and 90% = 4 seconds.	
Temperature compensation:	manual from 0 to 120°C. automatic by an external Pt-100 platinum by 2 or 3-wire. The unit calculates with 25°C when the Pt-100 sensor wires are broken.	
Temperature slope:	0.00%/°C (=without compensation) to 8.00%/°C.	
Conductivity of water:	is measured and temperature compensated.	
Reference temperature:	25°C	
Maximum length of cell cable:	Cable capacity is compensated automatically. The max. capacity must be <0.02µF	
Limit or alarm contacts:	two floating change-over contacts can be adjusted over the full range. Each can be defined as a normally open or normally closed contact by an internal slide switch.	
Adjustment of the limit contacts:	each limit value can be adjusted by a button on the front panel. The limit value is displayed by pressing the corresponding button and can be changed with the + or - button over the full measuring range.	
Range selection:	LED lamps left of the display indicates the selected range where the limit contacts are active!	
Status:	the limit status is indicated by two green lamps	
Hysteresis:	10 parts fixed	
Contacts rating:	change over at 6A/230VAC with resistive load	
Contact live:	200'000 operations at max. load	
Output current signal:	20'000'000 operation mechanically, without load	
	0...20mA or 4...20mA over the selected range.	
	0...20mA or 4...20mA can be defined by an internal slide switch which is accessible to the user.	
	The output signal is galvanically isolated.	
Output impedance:	>1M at 20mA	
Maximum load:	>500	
Supply voltage:	230V/50-60Hz, ca. 8VA	
Operating temperature:	-25...+70°C	
CE-Conformity:	fulfilled	
Case:	black plastic case 96x96 mm, aluminium shielded	
Mounting:	2 mounting clamps	
Terminals:	2 plug-in screw terminals for supply, limit contacts and signals	
Terminal description:	10 = Limit contact 1 norm. open 11 = Limit contact 1 norm. closed 12 = Limit contact 2 change over 13 = Protective earth PE 14 = Supply voltage N 15 = Supply voltage L1 16 = Pt-100 platinum sensor wire 1 17 = Pt-100 platinum sensor sense 1 18 = Pt-100 platinum sensor wire 2	
Weight:	800 grams (28 ounces)	
Warranty:	2 years	
How to order:	M9836-X	
	0=230VAC 1=115VAC 2=24VAC Tol. 10%	
	3=24VDC Tol. +15% -10%	
	X=power supply	
Options:	-leak proof housing IP54	
	-different cell constants	
	-cell: M8836s (0.01, 1.0 and 10 conductive)	
	M8836si (inductive)	

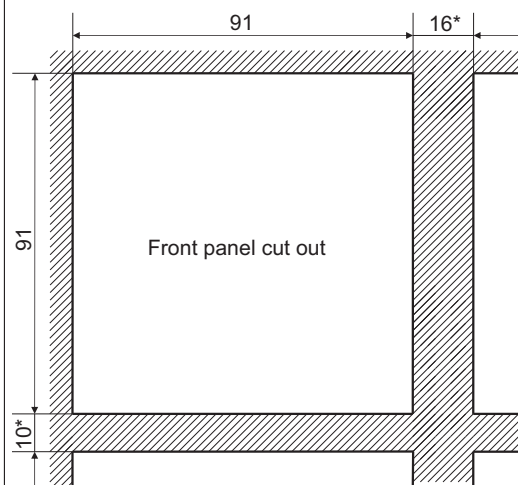
## Typical application:



## Dimensions:



## Cut out dimensions:



\*min. distance from one instrument to the next

# MOSTEC

Mess- und Regeltechnik  
 Lausenerstrasse 13a  
 CH-4410 Liestal  
 Switzerland  
 Tel. +41 61 9214090  
 Fax +41 61 9214083