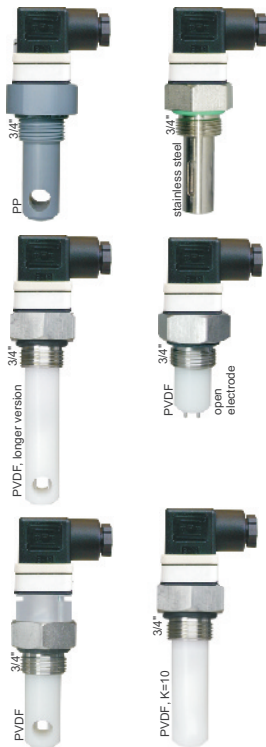


Conductivity Meter with two alarm contacts

available cells:



Technical description

The M2136 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. Temperature coefficient of the cell is compensated either manually or automatically by an external Pt-100 platinum probe within the range of 0°C to 120°C. Commercially available conductivity cells - K-factor 0.01, 0.1 and 1.0 cover a dynamic range from 0.01µS to 20mS full scale. An internal synchronous rectifier eliminates the capacitive error currents induced by the cell cable.

Optionally, a galvanic isolated and in the range of 0...20mA programmable output signal for the conductivity signal or temperature is available. By an external 24V signal, the current output can be switched between conductivity- and temperature measuring.

Two floating limit or alarm contacts can be set over the entire range. Each is 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.

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)
 0...20.00mS (K=1.0)
 0...200.0mS (K=10.0)

Range display: 2 red LED-Lamps
 Display: Red LED-display 4-digit, character high 10mm
 Accuracy: 0.5%
 Reproducibility: <0.2%
 Measuring frequency: 80Hz and 10kHz
 Measuring amplitude: 70/150mV, conductive cell only
 Step response: Time between a conductivity change from 0% to 100% or reverse measured between 10% and 90% = 4 seconds.

Input protection: virtual zero, protected by diodes
 Temperature compensation: manual form 0 to 120°C,
 automatic by an external Pt-100 platinum sensor, 2 or 3-wire.
 The unit calculates with 25°C when the Pt-100 sensor wires are broken.
 0.00%/°C (=without compensation) to 8.00%/°C.
 The 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 contacts: Two floating change-over contacts may be adjusted over the full range. Each can be defined as a normally open or normally closed contact by an internal slide switch.
 Status: two red LED-Lamps
 Hysteresis: adjustable, the factory setting is 5 digit
 Contacts rating: 1A with resistive load / 230VAC
 Contact live: 100'000 operations at max. load
 10'000'000 operation mechanically, without load

Option current output: programmable in the range of 0...20mA, galvanically isolated
 By a external 24V signal, the current output can be switched between conductivity- and temperature measuring.
 Conductivity measuring (terminal 14 & 15 open): Current output in depending of conductivity measuring
 Temperature measuring (terminal 14=0V, 15=24V): Current output in depending of temperature measuring

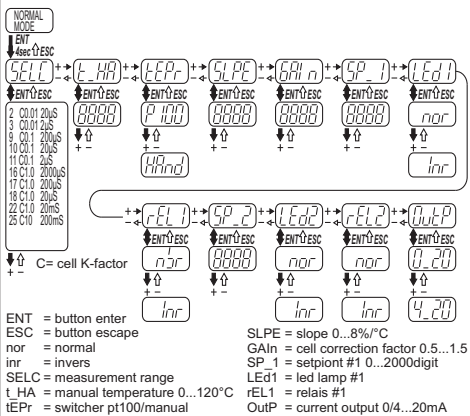
Max. load: 500
 Output impedance: >1M typical
 Device settings: with bush buttons behind the front panel, see operating manual
 change options: measuring ranges, cells K-factor, temperature slope, temperature, limit contacts: operating mode, hysteresis, status of the LED-Lamps

Power supply: 20 to 253VAC or DC
 Power supply load: 4.5 to 7.0W at 230VAC
 CE-conformity: fulfilled
 Terminals: 3 x 6-pole plug-in screw terminals
 Terminal description: 1 = supply voltage: AC~/DC(-)
 2 = supply voltage: AC~/DC(-)
 3 = supply voltage: PE
 4 = signal output PE
 5 = signal output (+)
 6 = signal output (-)
 7 = alarm contact 1, c.o. contact
 8 = alarm contact 1, n.c. contact
 9 = alarm contact 1, n.o. contact
 10 = alarm contact 1, c.o. contact
 11 = alarm contact 2, n.c. contact
 12 = alarm contact 2, n.o. contact
 14 = Switch signal for current output (0V)
 15 = Switch signal for current output (24V)
 19 = Pt-100 sensor +
 20 = Pt-100 sensor -
 21 = Pt-100 sensor sense -
 22 = conductivity cell PE
 23 = conductivity cell +
 24 = conductivity cell -

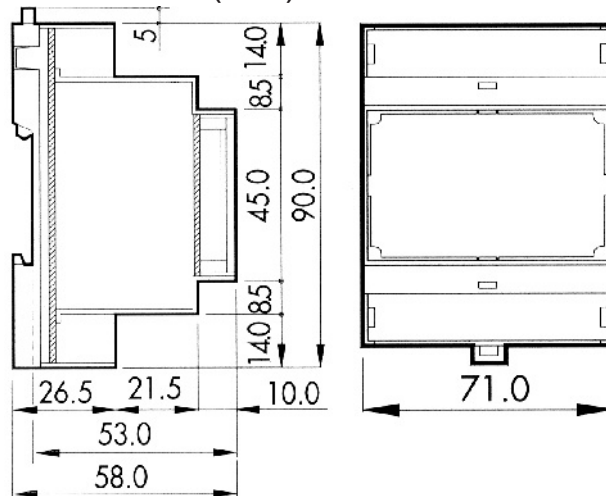
Mounting: 35mm mounting rail, EN50022-35
 Weight: 200g
 Warranty: 2 years
 Options: - conductivity cell type M8836s and M8836si
 - customer specified functions

c.o.= change over
 n.o.= normally open
 d.c.= normally closed

M2136 Menu Diagramm:



Dimensions (mm):



MOSTEC

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Cell connecting diagram :

