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MOSTEC

Inductive Conductivity Meter Type M2436

Front view

Available cells

Available adapters
(others on request)


Dairy pipe, DN40


Tri-Clamp, DN25-DN40


Seal for G1" sleeves


Adapter, G1.5" to 1"

Functions

- 2 current outputs
- 2 limit contacts
- Externally configurable
- Programmable
- Temperature compensation

Typical Application

- CIP-/ SIP-Cleaning

Technical description

The M2436si conductivity meter is mounted in a +/- 180° turnable, water resistant, stainless steel case. It measures the ohmic resistance of the liquid, without any electric contact to the measuring system. Because no metallic parts are involved, the cell has no polarisation. The liquid is in contact only with plastic parts, therefore the sensor is insensitive to fouling and encrusting. It can be cleaned mechanically, e.g. with a brush. The cell is directly attached to the M2436si.

The conductivity meter is suitable for water, waste water or ultrapure water conditioning in continuous or batchtype operating modes, for liquid chromatography or for general chemical process monitoring.
Temperature coefficient of the cell is compensated either manually or automatically by a Pt-100 platinum probe within the range of 0°C to 130°C.

For sterilization, the cell may be heated up to 140ºC until 30 minutes. The cell can't measure conductivity during this time.

The 8x2 LCD character display shows the currently measured conductivity and the process temperature.

These values are available at two galvanic isolated outputs of 0...20mA, 4...20mA or 0...10VDC.

Optionally, all measuring ranges are externally selectable with digital control wires during the measurement process. Two isolated, free limit contacts are also optionally available to control valves or other control elements.

The M2436 is powered by either 24VAC or DC.

Supply lines and all other lines, either from or to the conductivity meter, are protected by internal noise filters against HF-noise. A cable of either 2m or 5m is used to connect the M2436si signals and power supply.

Technical Data:

Measuring ranges:	0...2.000mS 0...20.00mS 0...200.0mS 0...2S
Display:	8x2 character LCD display with grey characters and a yellow back light Viewing area: 36.0mm x16.00mm, character size: 2.945mm x 5.545mm
Working temperature range:	-5 to +45°C
Accuracy:	0.5%
Reproducibility:	<0.2%
Step response:	Time between a conductivity change from 0% to 100% or reverse measured between 10% and 90% = 4 seconds.
Temperature compensation:	manual form 0 to 130ºC, automatic by an external Pt-100 platinum sensor, 2 or 3-wire.
Temperature slope:	0.00%/ºC (=without compensation) to 8.00%/ºC. Selectable in all measuring ranges.
Conductivity of water:	The self conductivity of ultrapure water is measured and temperature compensated.
Reference temperature:	25°C
Cell connection:	The cell is directly assembled to the M2436 over a temperature restraining, +/-180° turnable polyamide tube.
Option current output:	2 x 0/4...20mA, galvanically isolated
Max. load:	500
Output impedance:	>1M typical
Device settings:	with push buttons, see operating manual
options:	measuring ranges, cells K-factor, temperature slope, current outputs
Power supply:	24VAC/DC
Power supply load:	1.5 to 2.5W at 24VDC
CE-conformity:	fulfilled
Connection cable:	90° angle plug with PVC cable length: 2m, 5m or other sizes on request
Thread:	1" cylindrical gas, with O-ring, adapters on request
Case:	splash water proof, in stainless steel 1.4301
Weight:	500g
Warranty:	2 years
Compatible cells:	Type M2436si, others on request
Options:	- customer specified functions - customer specified cells - other power supply - other output signal - 2 limit contacts - externally configurable measuring range

Terminal description standard version (without limit contacts and externally configurable measurement range):

Waterproof 5-pin connector St1:	1	= current output (-) for pin 2 and 3	(brown)
	2	= conductivity current output (+)	(white)
	3	= temperature current output (+)	(blue)
	4	= supply voltage: AC~/DC(-)	(black)
	5	= supply voltage: AC~/DC(+)	(grey)

Terminal description for version with 2 limit contacts and externally configurable measurement range:

Waterproof 8-pin connector St1:	1	= conductivity current output (+)	(white)	5	= supply voltage: AC~/DC(+)	(grey)
	2	= current output (-) for pin 1 and 7	(brown)	6	= limit contact 1 c.o.	(red)
c.o. = change over	3	= limit contact 1 n.o.	(green)	7	= temperature current output (+)	(blue)
n.o. = normally open	4	= supply voltage: AC~/DC(+)	(yellow)	8	= limit contact 1 n.c.	(pink)
n.c. = normally closed						
Waterproof 8-pin connector St2:	1	= range configuration (GND)	(white)	2	= range configuration (+24V)	(brown)
	3	= limit contact 2 n.o.	(green)	4	= range configuration (+24V)	(yellow)
	5	= n.c.	(gray)	6	= limit contact 2 c.o.	(red)
	7	= range configuration (+24V)	(blue)	8	= limit contact 2 n.c.	(pink)

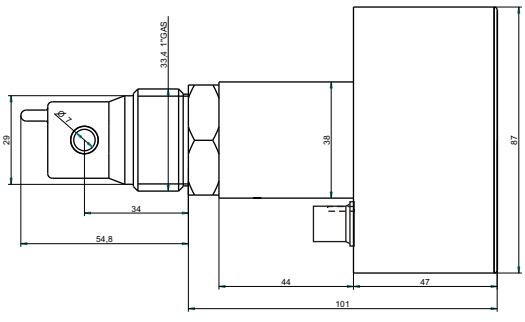
Setting the range by external control wires:

St2(white)	St2(brown)	St2(yellow)	St2(blue)	range, inductive
GND	0V	0V	0V	internal
GND	+24V	+24V	+24V	2mS
GND	0V	+24V	+24V	20mS
GND	+24V	0V	+24V	200mS
GND	0V	0V	+24V	2S

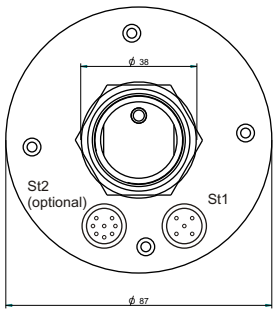
Table Torques:

Thread size:	Sealing system:	Torque:
G1”	PEEK / VA	10...20Nm

Dimensions (mm):



Side view



Bottom view

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