

# seko

## SMAG 103

Electromagnetic flow meter and Controller



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Our Commitment

## Electromagnetic flow meters are volumetric flow meter which do not have moving parts.

Electromagnetic flow meters are ideal for applications including wastewater treatment or any conductive or water based dirty liquid. Electromagnetic flow meters generally do not work with hydrocarbons, distilled water, and many non-aqueous solutions.

Measurement is based on Faraday's Law which states that the voltage induced across any conductor as it moves at right angles through a magnetic field is proportional to the velocity of that conductor. It is independent of the density, viscosity, temperature and pressure of the fluid. The conductivity of the fluid must be greater than  $5\mu\text{S}/\text{cm}$ .

### Principle applications include:

- Sludge and water treatment
- Control of civil and industrial wastes
- Measurement of industrial process water
- Control of the chemical dosage
- Energy industry: generation and distribution
- Extraction industries: quarries, mines



## Product line



### S103 M

**Size** from DN15 to DN2000  
(Flange UNI 2223)

**Pressure** from PN10 to PN64

**Lining** PTFE or Ebonite

**Material** Body in carbon steel,  
electrodes in hastelloy C

**Temperature**

Compact 25 – 80°C

Remote -25 – 200°C



## SMAG 103 Converter controller

The converter has been designed to meet **all the requirements of modern water management systems**. It supports extended functions which make it perfectly **suitable for measuring and billing** in civil, industrial and agricultural sector and for flow measurement in residual water treatment.

Enclosure Box	Compact on the sensor or remote on support (up to 100 m) Converter case Epoxy painted aluminum, IP 68
Power supply	100 – 240 Vac ; 12/24 Vac/dc
Output signals	Current active analogue output 4 – 20 mA
Digital output	Maximum pulses 1000 Hz duty cycle max 50% for negative flow Negative flow indication Cumulative alarm
Graphic Display	LCD 128 x 64 pixels, visual area 50 x 25mm, with backlight
Setting	4 totalizers available (2 positive totals and 2 negative totals) with 4 push buttons for non-billing applications through IrCOM interface and dedicated software via RS485 MODBUS RTU protocol
Data logger	4 MB flash memory, 200,000 lines of data (one line includes instant flow, 2 counters, date, time and temperature) 64 kB EEPROM, 2000 lines of data (one line includes: date, time, temperature, error codes, user actions with changes made)

### S103 S

**Size** from DN25 to DN100  
(Triclamp or DIN11851)

**Pressure** from PN10 to PN40

**Lining** PTFE

**Material** Body in SS 304, electrodes in  
hastelloy C

**Temperature**

Compact 25 – 80°C

Remote -25 – 130°C



### S103 C

**Size** DN3 to DN20  
(Thread Gas or NPT)

**Pressure** PN16

**Lining** PTFE

**Material** Body in SS 304, electrodes in  
SS 316 L

**Temperature**

Compact 25 – 80°C

Remote: -25 – 200°C



# Your Choice, Our Commitment

In the modern Globalised world, being a privately owned Company has significant benefits especially for our Customers, our Partners. For over 40 years, SEKO has developed a Global organisation able to take the longer view, manage the pressure of the now, and to plan for the long term, delivering true Partnership for our Customers, with transparency and mutual respect for each other.

Whether it's for our reknown flexibility, our attention to detail, the high-quality products, or just the way we do business, we understand that it's Your Choice to do business with us. It is Our Commitment to fulfill your needs wherever you, our Customers are.



For more information about our portfolio, worldwide locations, approvals, certifications, and local representatives, please visit [www.seko.com](http://www.seko.com)

As part of a process of on-going product development, SEKO reserves the right to amend and change specifications without prior notice. Published data may be subject to change.

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The SEKO logo, consisting of the word "seko" in a bold, blue, sans-serif font. The letter "s" is stylized with a thick stroke. The logo is positioned in the bottom right corner of the page.A large, dynamic graphic of a water splash or liquid droplet, rendered in various shades of blue, extending from the right edge of the page towards the center. It features intricate details of water molecules and bubbles.