

# SMAG 103 Series

ELECTROMAGNETIC FLOW METER CONTROLLER



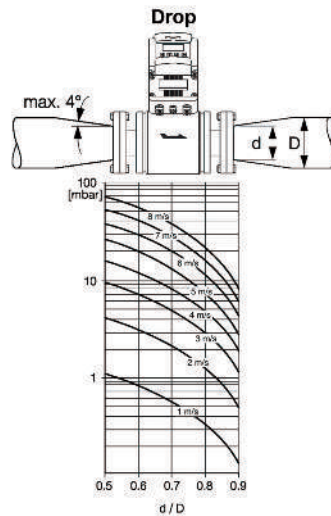
innovation > technology > future

# SMAG 103 Series

The electromagnetic flow meter is used to measure the flow rate of conductive fluids and waste water.

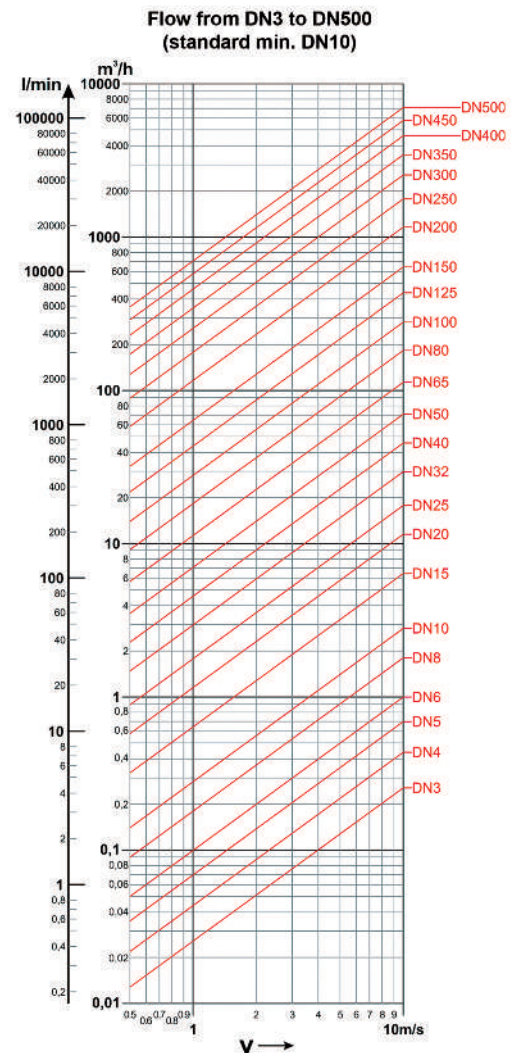
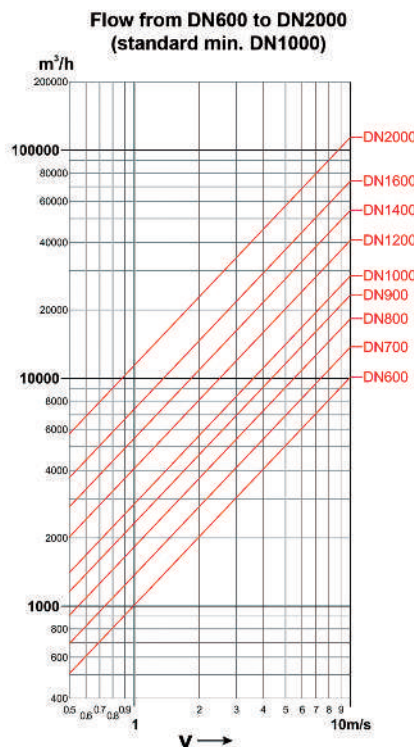
The measurement is independent of the density, viscosity, temperature and pressure. The conductivity of the fluid must be greater than  $5\mu\text{S/cm}$ .

The measuring tube must not be crossed by fluids carrying solid bodies of high dimension that cannot be considered suspended solids. Load losses are absent and straight stretches reduced upstream and downstream of the instrument are necessary.

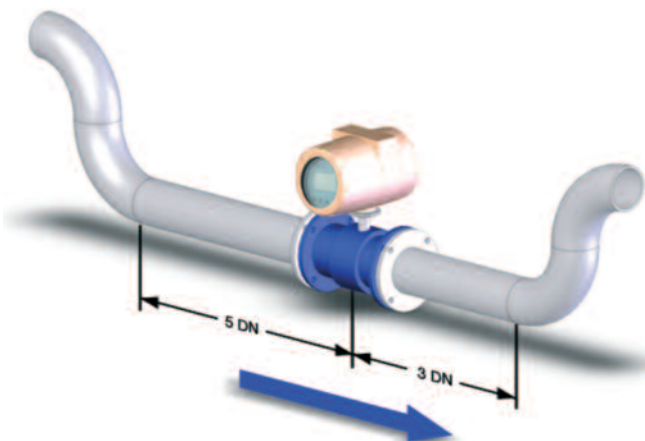


## MAIN APPLICATION FIELDS

- Sludge and water (primary, drinking and waste) treatment
- Control of civil and industrial wastes
- Measurement of industrial process water: chemical, paper, tanning, pharmaceutical, food
- Control of the chemical dosage
- Energy industry: generation and distribution
- Extractive industry: quarries, mines
- Environmental protection



ABACUS FOR THE OPTIMAL MEASURING TUBE SELECTION



## MOUNTING

The electromagnetic meter must be installed so that the pipe is always completely filled with fluid. In the case of a half-empty pipe, the meter must be installed in an underground channel, or in a "goose neck", to achieve a siphon effect.

Installation may be vertical or horizontal but in the latter case, ensure that there is no deposit of material on the electrodes.

Installation must take place in such a position that the piping cannot be emptied.



## SMAG 103 Converter controller

The converter has been designed with the purpose of meeting 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 128x64 pixels, visual area 50x25mm, with backlit.
Setting	4 totalizers available (2 positive totals and 2 negative totals) <ul style="list-style-type: none"> <li>■ With 4 push buttons for non-billing applications</li> <li>■ Through IrCOM interface and dedicated software</li> <li>■ Via RS485 MODBUS RTU protocol</li> </ul>
Data logger	<ul style="list-style-type: none"> <li>■ 4 MB flash memory, 200,000 lines of data (one line includes: instant flow, 2 counters, date, time, temperature)</li> <li>■ 64 kB EEPROM, 2000 lines of data (one line includes: date, time, temperature, error codes, user actions with changes made)</li> </ul>

### PRODUCTS LINE



Models	S103 M	S103 S	S103 C
Size	from DN15 to DN2000 (Flange UNI 2223)	from DN25 to DN100 (Triclamp DN11851)	DN3 to DN20 (Thread Gas or NPT)
Pressure	from PN10 to PN64	from PN10 to PN40	PN16
Lining	PTFE or Ebonite	PTFE	PTFE
Material	Body: Carbon Steel Electrodes: Hastelloy C	Body: AISI 304 Electrodes: Hastelloy C	Body: AISI 304 Electrodes: AISI 316 L
Temperature	Compact: -25 ÷ +80°C Remote: -25 ÷ +200°C	Compact: -25 ÷ +80°C Remote: -25 ÷ +130°C	Compact: -25 ÷ +80°C Remote: -25 ÷ +200°C

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**seko** is a leading manufacturer of dosing pumps and dosing systems with more than 40 years experience. This long activity allowed **seko** to acquire a vast experience in diversified applications and to confirm its international success in many industrial fields through the supply of reliable solutions for the dosing, injection and transfer of liquids.



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