

Eletta flow monitors and meters

for control safety and economy

ELETTA

— FLOW MONITORS —



Eletta flow

when you want to know

Eletta flow monitors

used for more than fifty years

Important application and product features

- Monitoring flows in cooling and lubricating circuits
- Antifreeze protection of heat pump systems
- Dry out protection
- Starting and stopping of pump motors
- Not affected by static pressure
- Can measure both liquids and gases
- Insensitive to strong magnetic fields
- Interchangeable control units to fit all pipe sections

The Eletta Flow Monitors are based on the proven and reliable differential pressure principle, using interchangeable orifice plates for different measuring ranges. They are available for threaded connections DN 15-40 and flanged connections DN 15-400.

The **A2** and **A5** models have a local bargraph style indicator showing the flow as well as a 4-20 mA signal output linear to the liquid flow. In addition to this, they are equipped with two independent adjustable set-point relays for setting alarms within the whole measuring range. This model is ideal for combining the rugged and reliable mechanical construction of the Eletta Flow Monitor with an analog signal output. This design gives a highly repeatable output signal which often excludes the need to use more expensive accurate flow meters.

The **R-series** takes advantage of the Eletta proprietary design and combines the long proven mechanical reliable function with an electronic circuit board providing electrical outputs linear to the flow of liquids and gases. The **R-series** is capable to give both a frequency and analogue output. The frequency output is linear to a flow between 200-1000 Hz and the analogue output is a linear current 4-20 mA. The accuracy is $\pm 3\%$ F.S

The **S2** and **S25** models have a large and easy readable dial of 130 mm which is clearly visible even in a harsh and dusty industrial environment. They have two micro switch set-points which are independently adjustable within the measuring range and they can be set for high and low flow alarms, for example.

The **V1** and **V15** are more basic models without local indication and only one micro switch set-point adjustable within the flow range of the Monitor. They use the same pipe sections as the A- and S-models which makes it possible to upgrade them in the future even after the installation, if local indication or a 4-20 mA electrical signal output is found necessary.

The Flow Monitors come in two measuring ratio, 1:2 and 1:5, which is indicated by the designation of the models. **A2**, **R2**, **S2** and **V1** have a 1:2 ratio, e.g. 6-12 l/min and **A5**, **R5**, **S25** and **V15** have a 1:5 ratio, e.g. 6-30 l/min. They are available in threaded or flanged (wafer) process connection and in different material of construction such as bronze, epoxy painted cast iron and stainless steel. Flow ranges are available from 0,4 l/min to 25 000 l/min.

A2
A5



R2
R5



S2
S25



V1
V15



Eletta flow monitors

are in use all over the world

Demanding environments, aggressive media, high temperatures

- Monitoring of flows at high temperature and of high viscosity
- Available in protection class IP65
- Available with various material qualities and surface finishes
- Rubber parts and servicing unimpeded by cramped installation
- Larger sizes and customised designs

The well proven and acknowledged principle of measuring flow with an orifice plate, creating a differential pressure which corresponds to the flow, is combined with a new smart pressure sensor arrangement.

The M-Series. It is simple, rugged and reliable. In the same time the M-series clearly shows the possibilities of differential pressure flow metering. The M-series flow meter is an expansion of the Eletta range. It is a compact, versatile and programmable electronic flow meter. All parameters are accessible through a standard computer interface and the flow rate remotely read via a standard 4 - 20 mA output. A low/high, flow alarm switch can be programmed to trip over the whole flow range. The turn down is 1:10.

M-series



These Flow Monitors are based on the principle of variable flow passage area. This makes them suitable for detecting small flows whilst at the same time letting large flows pass without any appreciable increase in pressure loss.

The **SP-G** and **EF-G** models are designed for smaller pipe dimensions with threaded process connections for DN 15 and DN20. The maximum flow capacity is 70 l/min and they are equipped with one pre-set set-point. This setpoint can be modified on site by simply replacing a calibrated disc and also the connections can be adapted to other dimensions by using nipples and reductions. The **SP-G** model has a mechanical micro switch and the **EF-G** has an inductive proximity switch.

SP-G EF-G



SP-GA is a larger model with a DN40 process connection and one mechanical micro switch. It also has a field-adjustable set-point within a range of 3-70 l/min whilst allowing a maximum flow rate of 300 l/min. Filters and reducer couplings are available to adapt it to smaller pipes as low as DN25.

SP-GA



PR1 is the well-proven low cost paddle type of switch which is suitable for applications where limited accuracy is required. The lowest set-point is approximately 100 l/min in a DN 50 pipe rising with the pipe dimensions. It is suitable for pipes up to DN250 and the process connection is 1" BSP thread. The **PR1** creates very small pressure loss as the paddle aligns itself with the flow.

PR1



A wide field of application

Eletta products monitor everything from simple cooling circuits in induction heating machinery to the gas flow of carbon dioxide in manufacturing processes. The company's proven orifice plate technology is highly effective and well recognized.

To secure a very high product quality for customers, Eletta is certified in accordance with the international quality system ISO 9001, ISO 14001 and the Pressure Equipment Directive, PED.

Find out more

In our technical data sheets you will find full details of the design, pressure drop graphs, measuring ranges and dimensional drawings. We welcome you to our web site at www.eletta.com for more information about Eletta and our Products.

Whatever your request for information is, our e-mail address info@eletta.com is the fastest way to get in contact with our Sales Support and technical department. Of course, your local Eletta Distributor can assist you in most cases.

Eletta

The company, which was founded over fifty years ago, is a Swedish company with subsidiaries in Sweden, Switzerland and in the USA. The Eletta Group operates in two industries; Measurement & Control and Pool-cleaners. It has approximately 150 employees and Eletta Flow AB is headquartered in Stockholm. Offices, manufacturing facilities and warehousing are located in Sweden, Switzerland, India, China and the USA.

Eletta Flow AB

The name Eletta has become synonymous with flow monitoring in many industries world wide where the Products are appreciated for their sturdy and robust design. Eletta Flow Monitors are of our own proprietary design and manufacture and the whole company is certified to ISO 9001 and ISO 14001 standards. Eletta Flow is also certified according to the Pressure Equipment Directive, PED. We export our Products all over the world and we have appointed Distributors in most European countries, Australia, South Africa, China, India and USA.



Eletta TIVG

The acquisition of the ABB TIVG Flow Indicator made Eletta Flow Monitors Product line even more complete and today Eletta is known to be the market leader in the field of mechanical Flow Monitors. The TIVG product line has been manufactured for more than thirty years and it is mostly used in rough and harsh environment where reliability and long life is of highest importance. These products have been in service in power stations around the world for many years and they are being specified again and again for new and refurbished plants. The Eletta TIVG is mostly sold outside our Distributor network directly through ABB companies around the globe. For more information, ask for our Eletta TIVG data sheet.

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