

The S-series Eletta Flow Monitor

with direct reading and dual
adjustable flow contacts



Eletta flow

when you want to know



GL series

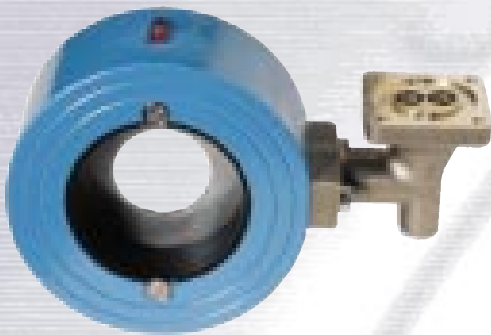
The Pipe Section is constructed of copper alloy and fitted with BSP/NPT threads from 15 mm to 40 mm (1/2"–1 1/2").

Benefits of the S-series

- Rugged and sturdy design
- Uses proven differential pressure technique
- Economical alternative to expensive flow meters
- Liquids and gases can be monitored
- Large 130 mm dial with linear scale for direct reading
- Two SPDT micro switches for adjustable flow alarm
- Insensitive to magnetic fields
- Intrinsically safe Ex ia through standard barriers
- Available also as direct reading flow monitor S02/S05

Important applications and product features

- Monitoring flows in cooling and lubricating circuits
- Antifreeze protection of heat pump systems
- Dry out protection
- Starting and stopping pump motors
- Shows flow without external power
- Low cost solution for difficult flow applications
- Interchangeable control units to fit all pipe sections
- Not affected by static pressure



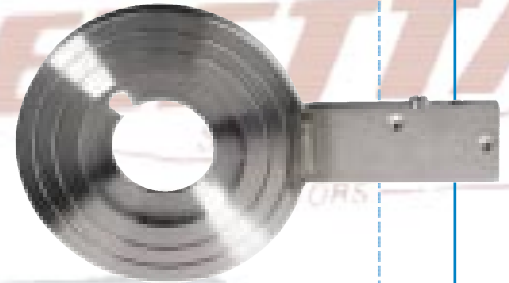
FA series

The Pipe Section has a flanged (wafer) process pipe connection and the material is bronze from 15 mm up to size 40 mm (1/2"-1 1/2") and epoxy polyester coated cast iron in sizes 50 mm to 400 mm (2"-16").



GSS series

The Pipe Section is made from Stainless Steel and comes with BSP/NPT threads in size 15, 20 and 25 mm (1/2", 3/4" and 1").



FSS series

The Pipe Section comes in stainless steel and has the same "fit between flanges" (wafer) execution as the -FA series and process connections from 15 mm to 500 mm (1/2"-20").

The S-series Flow Monitor

The Eletta Flow Monitor's function is based on the proven and dependable differential pressure principle. This is perhaps the oldest and most widely used principle for flow metering, mainly because of its simplicity and its relatively low cost.

The S-series Flow Monitor is used to monitor and control the flow of liquids and gases in pipes from 15 mm to 500 mm. The direct reading S-series has a large and easy readable 130 mm dial with a linear scale as standard and it can be fitted with a customized scale as an option. It is ideally suited for harsh and dusty industrial environments where its sturdy and robust design are appreciated. In addition, it is possible through the two independently adjustable SPDT micro switches, to set a low and/or high flow alarm to protect expensive equipment in various piping systems. The S-series can also be used in intrinsically safe circuits if the micro switches are powered through an approved Ex-barrier. The Monitor is insensitive to surrounding magnetic fields and it combines the long-standing proven mechanical function with outstanding reliability. Together with an exceptionally sturdy and robust design, this makes it extremely well suited for difficult environments. The S-series can also be ordered without the micro switches, designated **S02** and **S05**, and is then used as a direct reading flow monitor only.

The S-series comes in two measuring ratios designated **S2/S02** and **S25/S05**, which means that the **S2/S02** has a measuring span of 1:2 and the **S25/S05** has a span of 1:5.

Like all Eletta Flow Monitors the S-series can monitor both liquids and gases.

Modular design

All the Eletta Flow Monitors including the S-series can be fitted to any of the various Eletta Flow Monitor Pipe Sections to suit your application.

The Instrument consists of two parts mainly, i.e. the Pipe Section and the Control Unit. The Pipe Section is the part that is to be mounted in the process pipe and the Control Unit is mounted directly (standard) or remote onto the Pipe Section.

As the Control Unit is pre-calibrated before leaving our production facilities, you can change pipe sections in the field to fit other dimensions and materials than originally ordered without recalibration.

The Control Unit contains the two micro switches which, can be adjusted independently in the field within the measuring range for both high and low alarm.

The Pipe Sections come in Copper alloy, Stainless Steel, Cast Iron and sizes from DN 15/PN 16 (ANSI 1/2"/150 lbs) up to DN 500/PN 16 (ANSI 20"/150 lbs). The S-series Control Unit can also be used independently to upgrade an already installed Eletta Flow Monitor, such as A-, V- or R-models even after the installation.

Specifications S-series



Flow range:	0,4 – 25 000 l/min (liquid)
Min. flow:	S2 and S02: 50% of the full scale flow range S25 and S05: 20% of the full scale flow range
Wetted materials:	Copper alloy, epoxy painted cast iron. Seaworthy stainless steel 904L, stainless steel, 316
Rubber parts:	Nitrile (HNBR), EPDM and Fluorinated rubber (FPM)
Max. pressure:	16 bar (232 PSI)
Standards:	PN 16/ANSI 150 lbs
Max. temp. Control Unit:	0 - 90°C (194°F) std.
Max. temp. Pipe Section:	-GL and -FA: 120°C (248°F) -GSS, -FSS: 250°C (482°F)
Enclosure:	IP43 (NEMA3R) std. IP65 (NEMA4) option
Dial:	Large 130 mm diameter with linear scale and front glass of acrylic
Process Connection:	DN 15-40, BSP/NPT thread DN 15-500 DIN/ANSI flange (wafer)
Alarm:	S2 and S25 has 2 (two) micro switch SPDT contacts, independently adjustable within the ordered Flow range. S02 and S05 comes without switches
Micro switch spec:	Contact surfaces are silver plated as standard. Type: SPDT Hystereses: 10% Voltage: max. 460 VAC Current: max. 15 A Inductive load: 15 A@380 VAC 0,03 A@ 230 VAC 5A @ 30 VDC
	For intrinsically safe (IS) applications, we recommend to order micro switches with gold plated contact surface, which are better suited for the voltage and current limitations in the Ex-regulations
Accuracy:	<+/-5% F.S within 20-80% of Flow range <+/-10% F.S within 100% of Flow range
Repeatability:	< 2% actual
CE-approvals:	The Eletta Flow Monitors conforms with the EU directive for low voltage no: 72/23/EEC (EN 60 204-1, Part 1.) and Electro-magnetic compatibility according to the directive 89/336/EEC (EN 50081-1 and 50082-2). Complies with applicable parts in PE-Directive 97/23/EG

Eletta Flow Monitors

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 our manufacturing as well as the whole company is certified to ISO 9001 and ISO 14000 quality standards.

We export our Products all over the world and we have Authorized Distributors in most European countries, Australia, South Africa, India, Japan and USA.

Find out more

In our technical leaflets and manuals you will find full details of the design, pressure drop graphs, measuring ranges and dimensional drawings. We welcome you to our at all time updated web site at www.eletta.com for the most recent and accurate information about Eletta and our Products. At this site you can find most of the documentation on down-loadable files. Whatever your request for information is, our e-mail address: info@eletta.com is the fastest way to get in contact with our Customer Support and technical department. Of course, your local Eletta Distributor, whose address you can find in our homepage, can assist you in most cases.

ELETTA

FLOW MONITORS

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