

# The D-series

# Eletta Flow Monitor

With programmable  
digital display



**ELETTA**  
Sweden  
FLOW MONITORS



## Eletta flow

when you want to know



**D-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").



**D-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 painted cast iron in sizes 50 mm to 400 mm (2"–16").

### Benefits of the D-series

- Reliable and rugged DP Flow Monitor
- Liquid and gases can be measured
- Economical alternative to more expensive Flow Meters
- Digital back-lit graphic display for direct flow reading
- Two settable local alarms
- Analog and / or frequency output
- Simulation of outputs possible
- Re-settable flow totalizer within the chosen range
- Several languages in the menu
- Selectable volume units
- No moving parts in fluid
- Adjustable response time

### 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
- Low cost solution for difficult flow applications
- Interchangeable control units to fit all pipe sections
- Not affected by static pressure



**D-GSS series**

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



**D-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 ( $\frac{1}{2}$ "-20").

### The D-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 new D-series Flow Monitor is an extension of the Eletta Flow product portfolio following a demand from existing customers, who appreciate the sturdy design and reliability of the Eletta Flow products. When the product development engineers at Eletta designed the D-series, they took the chance to implement features in the software, which extends the user friendliness, and communications with distributed control systems. The digital display can be rotated electronically in 90 degree increments all over a 360 degree angle. The D-series Flow Monitor can then be installed in any position, vertically or horizontally, and with the flow coming from four different directions. There is also a re-settable flow totalizer, which summarizes the flow over time within the chosen measuring range. In order to conveniently set up a flow system at dry conditions, a simulation mode for the analog and frequency output signal can be activated.

### Modular design

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 (see photos above) and the Control Unit is mounted directly (standard) or remote onto the Pipe Section.

All the Eletta Flow Monitors including the D-series can be fitted to any of the Eletta Flow Monitor Pipe Sections to suit your application. The D-series Control Unit can also be used independently to upgrade an already installed Eletta Flow Monitor, such as A-, S-, V- or R-series even after the installation.

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

The Pipe Sections come in Copper alloy, Stainless Steel, Cast Iron and in sizes from DN15/PN16 (ANSI  $\frac{1}{2}$ "/150 lbs) up to DN500/PN16 (ANSI 20"/150 lbs).

The Control Unit contains the display in which you can easily adjust the monitor to your demands in field. Change your output, local alarms, language, the orientation of the display etc. The simulation function gives you the possibility to create and simulate a real mA-signal from the unit even if you don't have any flow.

## Specifications D-series

Flow range:	Liquids: 0,4 – 25 000 l/min, depending on pipe size. Please see separate flow chart for standard flow ranges Gases: will be calculated according to application
Flow turn down:	50–100% or 20–100% of Flow Range, depending on model
Accuracy*:	< +/- 2% F.S.
Wetted materials:	Copper alloy Painted cast iron Stainless steel 316
Pressure class:	PN16/ANSI150lbs
Enclosure:	IP65 (NEMA4)
Operating temperature	
Control unit:	-10 to 65°C (-18 to 150°F)
Max temp. Pipe Section:	GL and FA: 120°C (248°F) GSS and FSS: 250°C (482°F)
Process connection:	DN15–40 BSP/NPT thread DN15–500 DIN/ANSI flange, wafer type
Power supply:	18–30 VDC
Local display:	Backlit graphic display, electronically rotatable 90/180/270/360° 58x30 mm (2,6" FSTN)
Counter:	Re-settable flow volume counter
Alarm contact:	Two independent relays, user settable over the whole flow range Max 50V AC/DC Min. 1mA, 5VDC Max switching capacity: 30W
Analog output:	Isolated 4–20 mA linear to flow, (max 500 Ohm)
Frequency output:	Pulse frequency 200–1000Hz, linear to flow
Current consumption:	Max 100 mA
Calibration:	All Eletta Classic Model Flow Monitors and Meters are wet calibrated and adjusted in the factory before shipping.
Approvals:	The Eletta Flow Monitors conforms with all the EU directives applicable for our Products. Certificates can be found on our homepage: <a href="http://www.eletta.com">www.eletta.com</a>

\* Accuracy is stated as per reference-and ideal conditions i.e. straight runs, temperature, pressure, viscosity and density. Based on DIN 5167 standard.



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

The products are manufactured in Sweden and are exported to all continents. Eletta Flow AB has Authorized Distributors in more than 35 countries.

### 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 [www.eletta.com](http://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](mailto: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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