

# VIS 21089



## flowplus16 Compact Inline Fluid Sensor

### Description

#### flowplus<sup>16</sup>

The **ViscoTec flowplus<sup>16</sup> compact inline fluid sensor** delivers optimum process assurance for fluid dispensing or dosing applications. It finds application in critical processes where the highest levels of quality control are mandated, or where simple, reliable fluid pressure sensing is required.

By measuring the pressure of the liquid being dispensed or dosed, the flowplus<sup>16</sup> provides precise monitoring of flows up to 100ml/min, enabling you to achieve consistent results by detecting issues such as inconsistent material feed, clogging needles or nozzles, unsuitable needle-to-substrate distance or the presence of air bubbles in the fluid.

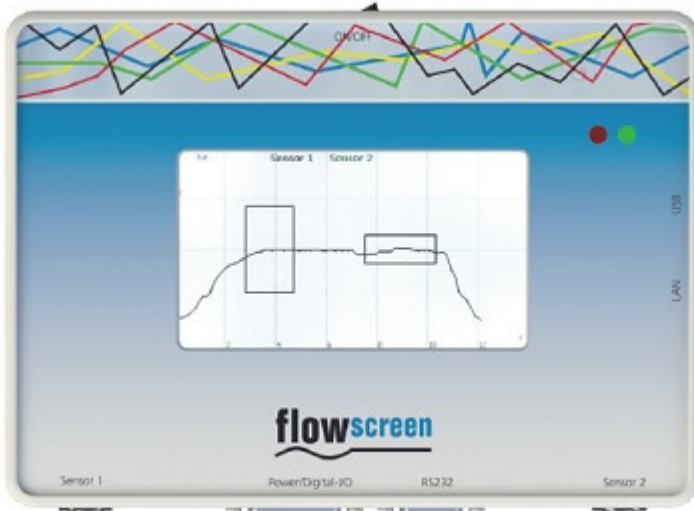
For laboratory or analytic work, the flowplus<sup>16</sup> will deliver pressure and flow information, and can analyse static and dynamic application flow mechanics using the output and appropriate software.

#### flowscreen

The **ViscoTec flowscreen evaluation unit** is designed and produced for the monitoring of dosing processes. Up to two pressure sensors can be attached. The pressure values determined from the measurement signals are shown on a graphic display.

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The flowscreen, when used in conjunction with the flowplus<sup>16</sup>, puts signals from the flowplus<sup>16</sup> into visual lines on the screen. Unstable or pulsating flow rates, e.g. pressure variations can be individually selected and evaluated to optimise your process. The intuitive user guidance of the software and the user-friendly touchscreen guarantee optimal process control for a lot of applications at any time.

### Features & Benefits

- Helps achieve optimum dispensing/dosing process control
- Precise flow pressure measurement
- Simple to connect and integrate

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- Industry-standard output signal
- Can be used with all fluids
- FDA-certified interior surface
- Compatible with all media via an FDA-certified FFKM perfluoroelastomer interior surface
- No dead space in the sensor
- Connects with any commercial PLC or intelligent evaluation system via M8 connector
- Standard 0-10V output signal
- Built in signal amplifier eliminates need for external transducers or boosters
- Standard luer lock fitting at both ends
- Easy to install and integrate into existing dispensing or dosing systems
- Maintenance-free, easy to clean
- Can be used in static or moving applications

### Applications

Measurable, consistent liquid flow enabled by the use of **flowplus<sup>16</sup>** and **flowscreen** helps users to guarantee reliability, safety and standards compliance in a wide range of industries, including:

- Life Sciences
- Laboratory
- Pharmaceutical
- Research & Development
- Electronics & Microelectronics
- Photonics
- Process Engineering
- Industrial

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■ Education & Academia

### Specifications

Technical Specifications of the flowplus <sup>16</sup>	
Flow rate	up to 100ml/min *
Measurement parameters	0 to 16 bar/overload 25 bar
Input voltage	12-30VDC
Material	Housing – coated aluminium. Interior flow channel – FFKM. Molding – TPU.
Signal	0.1 to 10V
Electrical connection	Push-pull connector/M8 sensor plug
Mechanical connection	Luer lock DIN EN 1707
Operating temperature limits	15°C to 45°C

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\* Depends on the viscosity and primacy pressure of the medium

Technical Specifications of the flowscreen	
Power supply	Mains adapter – 230 VAC / 50 Hz Analysis system – 24V DC
Display / resolution 4.3" TFT with resistant touchscreen	480 x 272 pixels / 100ms (10Hz)
Dimensions LxWxD (cm)	19 x 13.5 x 4.5
Input / output signals	Input: 2x analogue signal 0-10V Output: 1x ready, galvanically isolated
Interfaces	RS 232 USB (A port) LAN
Measurement programmes	Graphic display of the measurement values

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### Technical Specifications of the flowscreen

Measurement over a certain time period	Measurement without analysis Measurement with analysis over max. 2 measurement windows and 1x envelope curve (freely configurable)
Constant measurement	Measurement without analysis Measurement with analysis over max. 1 measurement window (freely configurable)

### Other Information

Our [Technical Articles and White Papers page](#) has white papers to download about this technology:

[A new fluid pressure sensor for process control and validation in critical dispensing and dosing applications by Peter Swanson](#)

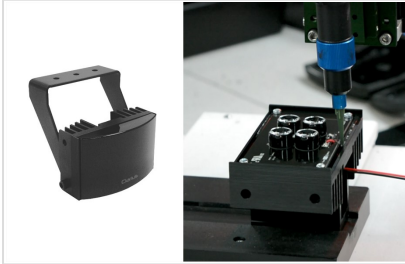
[The flowplus16 Pressure Sensor](#)

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See the **preeflow flowplus<sup>16</sup>** as part of a real application in this dispensing and robotics [Case Study](#):



### [Automated dispensing helps security manufacturer increase throughput and quality](#)

GJD Manufacturing switched to an automated method of dispensing silicone for sealing a plastic lens to aluminium housing. By doing this, they improved the throughput and quality of their white-light and infra-red LED illuminators for the security industry.

## Ordering Information

Part number	Description
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## flowplus16 Compact Inline Fluid Sensor

Part number	Description
VIS21089	flowplus <sup>16</sup> Fluid Sensor
VIS 21146	flowscreen Control Panel Unit

Supplied by:

**intertronics**

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