



flowplus¹⁶
+

Fluidsensor

PRESS RELEASE

For static and dynamic pressure measurements in microfluidics technology

With the relative pressure sensor flowplus 16 ViscoTec provides a pressure measurement system especially developed for the usage in dosing technology. The combination of characteristics like static and highly dynamic measurements (up to 3 Hz), a high range of operating temperature (+15 to +45°C), optimal metering precision ($\pm 2\%$ FS), minimal installation size (32 x 15 x 12mm) and integrated signal reconditioning (0.1-10 V) is unique.

Numerous advantages thanks to sophisticated constructions

Measuring pressures in low to high viscosity material is depending on the preferably direct coupling of the sensor element to the medium. At the same time negative influencing parameters like undercuts and dead spaces have to be avoided. Therefore ViscoTec's developers found a solution to transfer the pressure by an elastomer membrane. The highly chemical resistant membrane is seamlessly integrated in the fluid channel. The used material was developed to guarantee highest chemical resistance with constant flexibility. The clever construction enables a pressure measurement with a spectrum of 0 to 3 Hz and thanks to the used composition of material it is possible to prevent undesired interaction or changes in medium because of material incompatibilities. The standardized LUER-System additionally guarantees an easy and fast integration in variable applications and finds wide appeal in fluid technology. Service and cleaning are intuitively.

Integration of pressure sensor and signal conversion

The flowplus 16 pressure sensor is specified for operating temperatures between +15 and +45 °C with a tight total error distribution (including temperature failures) of $\pm 2\%$. The signal path is in real-time fully justified by a microprocessor controlled compensating electronic system. That's why the output signal retains its full dynamic of 3 Hz. The scanning rate is best suited for the detection of air bubbles in material as well as for progress analysis of dosing processes. The linearized, temperature compensated and power amplified analog output signal in the range of 0.1 to 10 VDC is perfectly suited for industrial applications with superordinated, programmable controller. The integrated cable break safety supports users on their way to perfect process reliability. The standard delivery of the sensor includes a quick coupling "Push-Pull" connector system. The also included 2 m extension cable is drag chain compatible and serially assembled with a standardized M8 sensor plug.