



Taking pressure measurement systems to the next level - GEMÜ C33

An ultra-pure pressure measurement device for the semiconductor industry

Features & advantages

- **Ultra-pure materials:** GEMÜ C33 has been specially designed for use in semiconductor production and consists only of ultra-pure fluoroplastics in all media-wetted components
- **No transmission fluid:** The “dry system” works without transmission fluid and prevents any contamination of the process medium in the event of leakage
- **Ceramic sensor:** Very high resistance to corrosive chemical media
- **Innovative sealing concept:** A PTFE sensor sheath completely encloses the sensor and the electronic system



Description

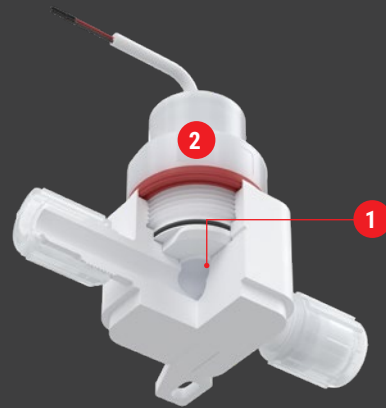
With the GEMÜ C33 pressure measurement device, GEMÜ is setting new standards in process monitoring. As the successor of the tried-and-tested GEMÜ C33 HydraDry, the GEMÜ C33 is synonymous with precision, reliability and future-proof process control.

The centrepiece is an innovative sealing concept that is unique on the market (see figure on the right). The ceramic sensor and the electronic system are completely enclosed here by a sensor sheath made of PTFE.

Since the diaphragm is an integral component of the sensor sheath in this design, this means that there is no separation point. This eliminates any risk of the process medium bypassing the sealing.

The media is separated without transmission fluid as a transfer medium; this is designated as a "dry system". This prevents contamination of the process medium in the event of leakage. Another benefit is its chemical resistance and outstanding precision and reliability, even under demanding application conditions.

New innovative sealing concept



The sealing is created by a ring on the sensor mounting bracket **1** and its opposite contour in the body. Screwing down a union nut **2** presses the ring into the contour, thereby creating the sealing.



Modular design and flexible combinations

The uniform design of the pressure pick-up enables simple adjustment and combination with different valve body versions.

The GEMÜ C33 pressure gauge is available as an in-line configuration ($\frac{3}{8}$ ", $\frac{1}{2}$ ", $\frac{3}{4}$ ", 1") and as a dead-end version ($\frac{1}{4}$ ", $\frac{1}{2}$ "). These are available with both the Nexus Connect® and Flare connection options, which enables their customer-specific and flexible installation in plant types.

Its compatibility with the GEMÜ C32 predecessor facilitates replacements and maintenance for existing customers.

Other important features of the GEMÜ C33

- **Leakage monitoring:** A special leak detection hole enables leakages to be detected at an early stage to ensure increased operational safety
- **Measuring range and signal standard:** The pressure measurement device covers a pressure measuring range of 0 to 6 bar (0–100 psi) and 0 to 2.5 bar (0–30 psi). It

delivers standardized signal outputs in the range of 4 to 20 mA

- **Planned certifications:** To ensure their compliance with UL certification guidelines, tests are being carried out on the GEMÜ C33