



## Pressure sensor for ultra-high pressure applications (DSNemo)

Traditionally, pressure sensors use a bending plate to increase sensitivity. For ultra-high pressure applications, the bending plate can be dispensed with. A sensor without a bending plate is being developed for this pressure range. This enables a much smaller design.

### CHARACTERISTICS

The technology platform developed offers the following potential:

- Front plate with a minimum diameter of 1 mm
- Pressure range up to approx. 20,000 bar
- Measuring span of > 20 mV/V maximum
- Operating temperature of 200 °C
- Use of piezoresistive Si chips
- Media contact via steel

As part of the “DSNemo” funding project, demonstrators were created at the CiS Research Institute to show how the solution works.



The research and development work in the project “Pressure sensor for ultra-high pressure applications“ (DSNemo) is funded by the German Federal Ministry for Economic Affairs and Climate Action.  
Funding code: 49MF220036

CiS Forschungsinstitut für Mikrosensorik GmbH  
Konrad-Zuse-Str. 14, 99099 Erfurt, Germany  
+49 361 6631410 info@cismst.de www.cismst.de

© 2024 CiS Forschungsinstitut für Mikrosensorik GmbH