

Title (en)
HIGH PRESSURE SENSOR

Title (de)
HOCHDRUCKSENSOR

Title (fr)
CAPTEUR HAUTE PRESSION

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Application
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Abstract (en)
[origin: WO2010130478A1] The invention relates to a construction concept for high pressure sensors, allowing simple and inexpensive production of reliable high pressure sensors, even for pressure ranges above 2200 bar. Such a high pressure sensor (10) comprises a sensor element (1) for capturing pressure and a connecting piece (2) for coupling the sensor element (1) to a measurement system, wherein a membrane (13) is implemented over a blind opening (12) in the base body (11) of the sensor element (1), wherein a pressure channel (22) is formed in the base body (21) of the connecting piece (2), and whereby the sensor element (1) is mounted on the connecting piece (2) so that the membrane (13) can have the measured pressure applied via the pressure channel (22) that opens into the blind opening (12). According to the invention, the blind opening (12) in the base body (11) of the sensor element (1) is implemented as a cone tapering toward the membrane (13) at least in one segment, and the end (23) of the pressure channel (22) facing the sensor element (1) is implemented as a tube. Said tube-shaped end (23) of the pressure channel (22) is pressed into the blind opening (12), so that the tube wall is sealingly pressed against the side walls of the blind opening (12).

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