Piezoelectric Spheres and Hemispheres in Miniature Format for Ultrasonic Sensor Applications

PRESS CONTACT

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**PI Ceramic also manufactures piezoelectric spheres and hemispheres in miniature format. The spheres are suitable for ultrasonic applications that require 360° sensing and are used for example, in medical technology.**

Piezoelectric hemispheres and hollow spheres are available in new sizes. The outer diameters are between 2 and 100 mm. Wall thicknesses of 0.2 mm are possible with outer diameters of up to 10 mm. Other sizes are available on customer request.

Applications

Thanks to their design, the components are generally suitable for applications, which function as 360° sound transducers with a high bandwidth. Their compact design allows them to be integrated into the smallest systems and can, for example, be used for sensor applications in medical technology.

Application-Specific Adapted Design

The components are manufactured according to the application range, from ferroelectric soft or hard piezo materials. This enables optimum setting with respect to the coupling factor and acoustic impedance. The spheres can be made with a hole or groove for easy mechanical integration.

1,084 characters (incl. blanks)



Comparison of piezoelectric hemisphere sizes

Further information at:

<https://www.piceramic.com/en/products/piezoceramic-components/spheres-and-hemispheres/>

PI Ceramic in Brief

PI Ceramic is a world leader in the field of piezo actuators and sensors. The broad range of expertise in the complex development and manufacturing process of functional ceramic components combined with state-of-the-art production equipment ensures high quality, flexibility and adherence to supply deadlines. Prototypes and series production of custom-engineered piezo components are available after short processing times. PI Ceramic also has the capacity to manufacture medium- to large-sized series in automated production lines. PI Ceramic, a subsidiary of Physik Instrumente (PI) GmbH & Co. KG, is located in Lederhose, Germany.