Safety for People and Machines – Pepperl+Fuchs Introduces NEW Ultrasonic Sensors for Safety Applications

The ultrasonic sensor system brings safety to applications where it was not possible before. Whether in very tight installation spaces, in dusty environments or outdoors—with the USi[®]safety, safe protection can now be achieved anywhere.

September 2021 (Twinsburg, OH) – Pepperl+Fuchs is expanding its factory automation portfolio with the all-new USi-safety ultrasonic sensor. Suitable for use in harsh environments and even for outdoor applications, this small but mighty sensor requires only a small amount of installation space.

With safety certification in accordance with EN ISO 13849 category 3 PL d and as the only sensor of its kind in the world, the new USi-safety reinforces Pepperl+Fuchs' position as a market leader in ultrasonic sensors and safety applications.

The USi-safety is a 2-channel ultrasonic sensor, featuring two transducers connected to a control interface. On each of the two independent channels, objects can be detected via an elliptical sound beam within ranges of up to 2500 mm. Two safe OSSD outputs are provided for signal output.

Due to the special "wide and shallow" shape of the detection field, the system can be successfully used just above the floor or close to a wall. Perfected for monitoring in threedimensional space, the optimal protection of machines, vehicles and persons is therefore ensured. This is made possible by the special shape of the sound beam: while conventional ultrasonic sensors emit acoustic signals in the form of a radially symmetrical sound beam, the USi-safety does so in an elliptical sound field. Due to the opening angle of $\pm 17^{\circ}/\pm 5^{\circ}$, a particularly wide detection range is generated in one plane and a narrow detection range in the other plane. The USi-safety joins the existing Pepperl+Fuchs safety portfolio, which includes inductive safety sensors, photoelectric sensors and light grids, safe positioning systems, safety-related AS-Interface components, and many different explosion-protected interface modules. "The USisafety is the perfect complement to our broad portfolio of ultrasonic sensors and extends our range of products in the strategic target sectors of intralogistics and mobile machines to include an intelligent and highly reliable solution for safety applications," says Reiner Müller, President of the Factory Automation Division at Pepperl+Fuchs.

Application Examples:

- Reliably preventing collisions involving driverless forklifts
- Machine safeguarding in the wood industry
- Personal safety in lane-guided AGVs

About Pepperl+Fuchs

Pepperl+Fuchs is a world leader in the design, manufacture and application of high-quality factory and process automation products and services. Pepperl+Fuchs pioneered the development of proximity sensors 50 years ago, and has set the standard for innovation and quality ever since. Pepperl+Fuchs, 1600 Enterprise Parkway, Twinsburg, OH 44087; (330) 486-0002; fax: (330) 425-4607; <u>fa-info@us.pepperl-fuchs.com</u>; <u>www.pepperl-fuchs.com</u>.