**+++ Press Release +++**

POSITAL Announces Next-Generation TILTIX Inclinometers with Analog Outputs

**Hamilton, NJ, October 26, 2023** – As part of its ambitious NEXTGEN program, POSITAL has released new members of its TILTIX inclinometer family with analog communications interfaces. The new versions are mechanically and electrically compatible with older models and share the same mounting footprint.

POSITAL’s TILTIX inclinometers are used in motion control and safety assurance systems to measure a device’s orientation with respect to the earth’s gravitational field. Common applications include dynamic positioning of solar panels, rollover warning systems for mobile machinery, control systems for crane booms, and tilt control in robots, AGV’s and other material handling systems. (For applications that involve rapid motions, check out POSITAL’s family of acceleration compensated Dynamic TILTIX inclinometers.)

The new TILTIX inclinometers incorporate 3-axis MEMS accelerometer sensors that reduce cross-axis sensitivity and improve measurement accuracy to ± 0.1 degrees over the full range of tilt angles.

A feature of TILTIX inclinometers that is especially important for analog control systems is a programmable function that enables users to set the measurement range of each device through simple software updates. By adjusting their sensitivity, these instruments can be set up so that their full output range (4-20 mA, 0-5 Volts or 0-10 Volts) exactly spans the expected range of motion, significantly improving measurement accuracy. TILTIX inclinometers can also be programmed to act as limit warning switches.

The new generation of TILTIX inclinometers have several other programmable features that can be used to modify their performance in response to specific application requirements. They can be programmed to function as a single axis (0-360°), two-axis (± 90°), or 2-axis pitch/roll (± 180°) sensors. Multiple signal filtering methods are available, including moving average, recursive, Butterworth, critical damping and Kalman filtering. These enable users to fine-tune signal quality and dynamic response. These programmable features benefit both users and. distributors, since a limited number of hardware configurations can be readily adapted to applications ranging from off-road machinery to materials handling equipment. TILTIX inclinometers can be ordered pre-programmed from the factory or set up on-site with POSITAL’s user-friendly UBIFAST programming tool.

The new inclinometers will be available in either cost-efficient fiber-reinforced plastic housings or IP69K-rated metal enclosures. The full range of TILTIX inclinometers can be accessed through POSITAL’s online [Product Finder](https://www.posital.com/en/products/inclinometers/TILTIX-Inclinometer.php) portal.

**About FRABA and POSITAL**

POSITAL is a supplier of advanced industrial position sensors used in a wide variety of motion control and safety systems. The company is also an innovator in product design and manufacturing processes and a pioneer of Industry 4.0 (Industrial Internet of Things/IIoT), offering customers the benefits of built-to-order products combined with the price advantages of mass-production. POSITAL is a member of the international FRABA group, whose history dates back to 1918, when its predecessor, **Fr**anz **Ba**umgartner elektrische Apparate GmbH, was established in Cologne, Germany to manufacture relays. Since then, the company has played a trendsetting role in the development of rotary encoders, inclinometers and other sensor products. POSITAL has a global reach with subsidiaries in Europe, North America and Asia – and sales and distribution partners around the world.

**Graphic** (see attachment: Press Photo – in JPEG format)

Caption: Next generation TILTIX inclinometers are now available with analog communications Interfaces.

###### **Further Information**

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