Mobile and Flexible

The JUMO Wtrans p Pressure Transmitter with Wireless Data Transmission

Screw in – link up – ready to go! The new JUMO Wtrans p wireless pressure transmitter is quick and easy to mount and install.

Whether in stationary plants or in mobile systems, in hard-to-access areas, or even in rotating components: the JUMO Wtrans p reduces the effort required for installation and assembly – both in the reconception of a plant and when retrofitting an existing measuring location. In addition, the device saves cables and enables pressure measurements, especially where a cable extension would be impossible or would require too much technical effort.

The pressure transmitter with protection type IP 67 records relative and absolute pressures from 250 mbar to 600 bar. Within a range of up to 300 m the measured values are then sent to the JUMO receiver. Transmissions are made via the 868.4 MHz radio frequency of the license-free SRD band. A value in the range from 500 ms to 3600 s can be selected as the transmission interval. The battery in the transmitter lasts for up to one year depending on the transmission interval setting.

The receiver can make the measured values available via four analog outputs [0(4) to 20 mA, DC 0 to 10 V], two analog outputs and two potential-free relays, or via an RS485 interface with Modbus protocol. A maximum of 16 Wtrans transmitters per receiver can be operated via the interface. They can also transfer other measured values such as temperature, resistance, or voltage if required.

The user-programmable pressure transmitter is configured via a convenient setup program using a laptop. The laptop is connected to the transmitter via a commercially-available mini USB cable. Once the process parameters are determined and saved, they can be easily and safely transmitted to other devices.

Special applications can be implemented with the help of a customer-specific linearization. On the basis of 40 pairs of values that can be input, the customer can choose to make a linear approximation or to have a 4th order polynomial function calculated as a specific characteristic line. Alternatively, the polynomial function can be implemented by directly entering a parameter. In addition, a measured value diagram – a so-called online chart – can be included in the setup. This graphic monitoring for analyzing and documenting measured values supports the startup process.

The compact wireless transmitter has a high level of vibration resistance. On the sender side, the device can be operated at temperatures from –30 °C to +85 °C. The JUMO PEKA process connection adapter system in conjunction with other threaded connectors is certified by the EHEDG (European Hygienic Engineering and Design Group) for use in hygienic processes such as in the food and luxury food industry. The seals of this EHEDG version meet the requirements of the FDA (Food and Drug Administration).