Factory automation made easy – with radar sensor VEGAPULS 42

With VEGAPULS 42, VEGA brings its extensive experience with radar measurement technology to factory automation. Equipped with IO-Link and versatile hygienic adapters, the new level sensor meets the key requirements of modern industry: to perform complex measuring tasks faster, be simple to use and more cost-effective.

VEGA has launched a new radar level sensor especially for highly automated processes with stringent demands on hygiene and capable of following fast level changes. By introducing VEGAPULS 42, the instrumentation specialist completes its IO-Link portfolio, which now offers a range of solutions for level measurement, point level and pressure.

Radar reduced to the essentials

Since the various automation technologies in many factory environments are increasingly converging, VEGA's IO-Link portfolio is now able to offer optimal solutions for applications that extend beyond the boundaries of primary processes. "Our customers can rest assured that they're in good hands with us for all their applications," says VEGA product manager Marvin Moser, explaining the current situation. "This requires us to proceed with the greatest care. For that reason, we've carefully integrated cutting-edge technology into all the main functions of this sensor. At the same time, we've consistently refrained from 'over-designing' the sensor. That means it has also been stripped of everything that makes it unnecessarily expensive and technically over-complex."

Everything but complicated

This means that VEGAPULS 42 is designed specifically for medium measuring distances of up to 15 metres and temperatures of up to max. 150 °C. The instrument is geared to circulation systems in production, dosing processes and downstream processes, like those found in conveying and filling systems. It ensures a smooth-running process wherever a level changes quickly and requires continuous monitoring. Or in short: VEGAPULS 42 design has been focussed on what is absolutely necessary: It is tailor-made for all standard applications where more functions would only make things more complicated.

A big lead in radar know-how

“If you can do the one, you can also do the other,” it is often said, referring to the merging of process automation and factory automation. However, the two areas are so different from each other that it is easier for the measurement technology of process automation to establish itself in factory automation than the other way around. VEGA’s success story, which culminated in its current position as the world market leader in radar level instrumentation, began more than 30 years ago. The company is now applying the experience and knowledge gained to factory automation solutions. Accordingly, VEGAPULS 42 is based on the best radar chip currently available on the market – with the widest dynamic range, which offers excellent performance and application versatility.

High quality stripped down to the basics

To still be able to monitor current operating states in a highly efficient and cost-optimized manner, every design element of the chip was critically examined for its usefulness. The same principle applied to the IO-Link communication technology, which is common in factory automation, enabling bidirectional data transmission together with extensive diagnostics and parameterisation. For IO-Link sensor VEGAPULS 42 this means: maximum signal quality at minimal cost and complexity.

Radar is the better choice

With the instruments in its IO-Link portfolio, VEGA now adds the advantages of radar measurement technology to a wide variety of processes in factory automation and focusses even more on hygiene-critical industries like food and pharmaceuticals. Radar is the right choice for continuous, non-contact level measurement because, unlike ultrasonic sensors, it is not influenced by the process and ambient operating conditions. Use of the most reliable, cost-effective measurement technology available makes all the difference, especially in factory automation.

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