Press release

31 May 2022

Intelligent, flexible and connected

Wilo presents the smart sewage pumping station Wilo-Rexa SOLID-Q with Nexos Intelligence at the IFAT 2022.

Dortmund/Munich. Wilo is showcasing the Wilo-Rexa SOLID-Q sewage pump with Nexos Intelligence at the IFAT, the world's leading trade fair for water, sewage, waste and raw materials management. The technology company based in Dortmund developed the intelligent pump series specifically for the requirements of modern wastewater management with maximum operational reliability in mind. The system solution is suitable for pumping untreated sewage in medium-sized pumping stations in wet and dry well installation.

The Wilo-Rexa SOLID-Q has an automatic calibration system, which determines the optimal speed for the specific operating environment autonomously at regular intervals and adjusts it as desired. In this way, the pump system minimises energy consumption due to pipe friction losses and guarantees consistently efficient and safe operation.

The integrated clogging detection system ensures maximum reliability, automatically triggering a cleaning operation as soon as it detects an impeller that tends to get blocked. Thanks to these properties, the smart sewage pump is able to detect changes in its operating environment autonomously and adjust to them automatically.

The Wilo-Rexa SOLID-Q also has a redundant main/standby control system: In a network of up to four pumps, one pump is operated as the main pump and controls the operation. However, each individual pump has the same electronics and can thus take over the control function as required. The advantage in operation is that if the main pump is switched off, for example for maintenance, any other pump in the network can automatically take over control straight away and thus continue operation without the user having to intervene.

WILO SE
Wilopark 1
44263 Dortmund
Germany

Press release

The so-called Nexos Intelligence with integrated PLC control functions is installed on the Digital Data Interface (DDI) that is mounted on the motor head. This means that the entire control intelligence is already integrated into the pump and no other external control is required. The external frequency converter associated with the system is conveniently parametrised by the pump at the push of a button during commissioning.

The motor's integrated electronic module contains an IP-based digital Ethernet interface, as well as a data logger, a digital rating plate and integrated vibration monitoring. The integrated Ethernet interface makes it easier than ever before to connect the pump to the system using just one plug, despite the extensive array of sensors, and to locally control and monitor it via an externally connected touch panel or directly via the computer. Users can access the system interface directly via the web browser regardless of the operating system used.

The standardised network protocol also enables easy integration into the existing system control and into remote transmission and remote maintenance environments. All operating data, such as the winding and bearing temperatures, but also frequency converter performance data or the fill level of the chamber are stored in the integrated data logger. By exporting data via the web server or continuously via the digital bus interface, the operator can analyse the information in more detail or troubleshoot possible causes of a system malfunctioning.

The IE5 permanent magnet motor of the Wilo-Rexa SOLID-Q achieves maximum electrical efficiency over a significantly wider load range compared to asynchronous technology. This reduces energy costs, even in partial load operations. The new hydraulics are similar to the proven SOLID-G impellers, but thanks to their two blades achieve a higher level of efficiency and tend to vibrate less, making them particularly suitable for control on the frequency converter.

Image:

WILO SE
Wilopark 1
44263 Dortmund
Germany

Press release

Image caption: Wilo presents the sewage pumping station Wilo-Rexa SOLID-Q with Nexos Intelligence at the IFAT 2022.

WILO SE
Wilopark 1
44263 Dortmund
Germany

Press release

Wilo press contact:

Marco Stapelmann

Head of Corporate Marketing

Group Marketing

T: +49 231 4102 6088

M: +49 151 728 489 79

@: marco.stapelmann@wilo.com

About Wilo:

The Wilo Group is one of the world's leading premium suppliers of pumps and pump systems for building services, water management and the industrial sector. In the last decade, we have evolved from a hidden to a visible and connected champion. Wilo employs around 8,200 people around the globe today. With innovative solutions, smart products and individual services, we provide the clever, efficient and climate-friendly service of keeping water flowing. We already are the digital pioneer within the industry with our products and solutions, processes and business models.

For more information, go to www.wilo.com