

Advantages at a glance

- ▶ Reduced noise exposure for machine operators and the surroundings
- ▶ Cost savings by eliminating secondary noise reduction measures
- ▶ Helps to meet legally prescribed noise limits
- ▶ High efficiency and long service life
- ▶ Compatible with all other Rexroth external gear pumps for ease of retrofit



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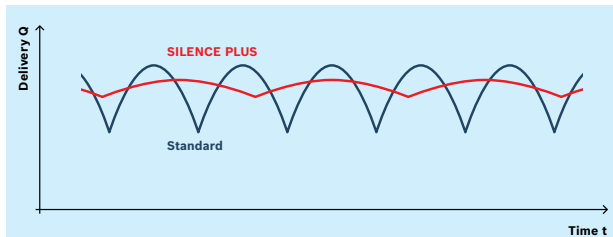
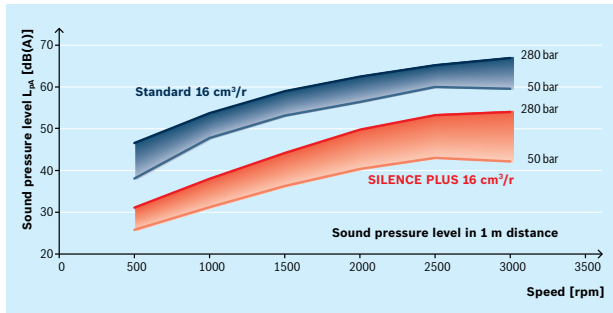
A Quantum Leap in Noise Reduction



SILENCE PLUS – reduces noise levels and saves money

Rexroth introduces the new, even quieter generation of external gear pumps: The SILENCE PLUS reduces the noise level by an average of 15 dB(A) compared with conventional external gear pumps. The pleasant, significantly lower inherent sound is perceived in all pressure and speed ranges. SILENCE PLUS results in a lower noise level for both the operator and other persons in the vicinity. No costly, noise-reducing secondary measures are necessary. The low-wear design also ensures efficiency and long service life.

▼ **SILENCE PLUS features an inherent noise level 15 dB(A) lower on average.**

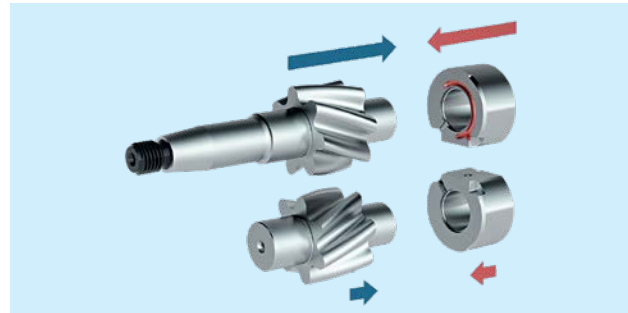


The flow pulsation lowered by 75% reduces vibration in the machine, and a 35% lower frequency produces a more pleasant sound.

The innovative technology of SILENCE PLUS



◀ Continuous tooth contact reduces operating noise: A non-involute rounded tooth profile, combined with helical cut teeth, forms the heart of the SILENCE PLUS. Thanks to permanent tooth contact the fluid is transported almost continuously and noiselessly. The possibility of noise from trapped oil between the tooth flanks is prevented in the first place.



▲ Hydrostatic bearing ensures long service life: The high performance and long service life of the SILENCE PLUS is due to a Rexroth patented solution: Hydrostatic grooves provide wear-free compensation for the internal axial forces generated in the helical gear – even at pressures up to 280 bar!

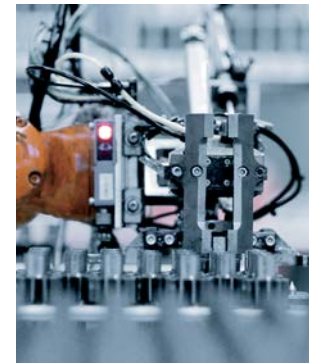
Compatible with Rexroth external gear pump series

The AZPJ-2x series of the SILENCE PLUS family first includes the nominal sizes 12–28 cm³/revolution. With dimensions identical to other series of Rexroth external gear pumps, the noise-reduced SILENCE PLUS is simple to integrate into existing systems. This means: A simple replacement makes work machinery quieter with the same quality and efficiency.

Development and manufacturing competence from Rexroth

A core competency of Rexroth is the manufacture of high-precision pump drives. The tolerance requirements for all components are in the micrometer range—and reliably so. With their quality management system Rexroth achieves consistently high quality that is the industry standard.

To develop external gear units at Rexroth, not only 3D CAD and FEM strength analyses are used, but also modern optimization methods such as complex gearing calculations and vibration simulations.



Rexroth places great emphasis on high efficiency and low noise emission. The latest measuring methodologies in a soundproof chamber per DIN and ISO standards guarantee optimum development results.