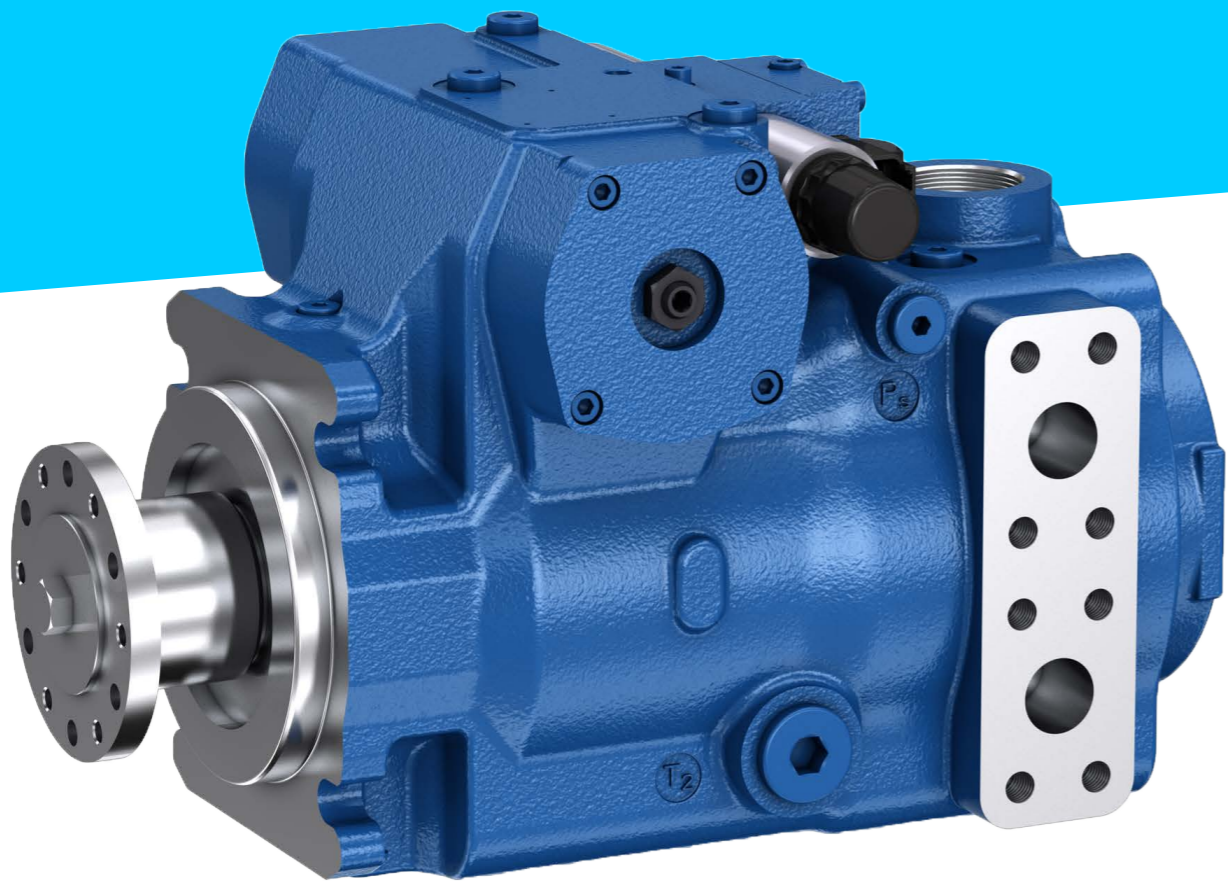


Axial Piston Variable Pump A10VGT Series 11

High Energy Efficiency and Compact Design

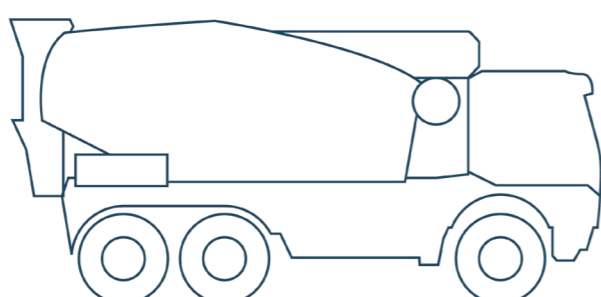


High reliability and robustness under the most extreme conditions and the reduction of the total cost of ownership (TCO) are some of the requirements machine operators and fleet managers place on concrete mixer manufacturers. Moreover, increasingly stringent emission regulations call for energy-efficient and space-saving hydraulic units. The Rexroth axial piston variable pump A10VGT Series 11 was developed to fulfill these requirements. This pump is particularly suitable for the drum drive of concrete mixers.

CUSTOMER BENEFITS

- Expansion of the product portfolio for concrete mixers
- Noise reduction by reducing the idle speed of the diesel engine
- Increase in energy efficiency
- Low weight – best in class
- Compact design – best in class
- Suitable to fulfill future safety requirements for concrete mixers in Europe

APPLICATIONS



FUNCTION AND BENEFITS

Expansion of the product portfolio for concrete mixers

Rexroth has expanded its product portfolio for drum drives of concrete mixers with the new Rexroth A10VGT Series 11 in swashplate design. The product range includes the sizes 71 cm³, 90 cm³ and 115 cm³. In contrast to the predecessor series 33, a version is available for concrete mixers with a larger drum capacity – the 115 size. Together with the Rexroth axial piston fixed motor A2FMT series 70, Bosch Rexroth offers a perfectly coordinated and efficient drive solution for working hydraulics.

Noise reduction by reducing the idle speed of the diesel engine

The new 115 size enables the implementation of energy-efficient, noise-optimized drum drive systems. When using the 115 size in place of sizes 71 or 90, the idle speed of the diesel engine can be reduced, without slowing down the drum drive. Lowering the diesel engine speed also reduces the noise level of the concrete mixer. This is particularly advisable when the concrete mixer is at a standstill (for example when waiting on a building site). A positive side effect of reducing the idle speed is the decrease in fuel consumption and subsequent increase in energy efficiency. Alternatively, a mixer drum with a larger capacity can be used instead of reducing the idle speed.

TECHNICAL DATA

Axial piston variable pump A10VGT Series 11

Sizes:	71	90	115
Maximum pressure:	420 bar	420 bar	420 bar
Maximum speed:	3000 rpm	3000 rpm	on request
Installation length:	301 mm	301 mm	317 mm
Weight:	51 kg	51 kg	59 kg
Working ports:	1 in nach SAE J518 (metric fastening thread)		
Flanges:	SAE J744 127-4		
Drive shafts:	1 3/8 in 21 T 16/32 DP	1 1/2 in 23 T 16/24 DP	1 1/2 in 23 T 16/24 DP
	with or without coupling flange		
Control devices:	▶ HW – Proportional hydraulic control, mechanical servo ▶ EP – Proportional electric control with manual override		
Data sheet:	92770		

$\Delta p \Rightarrow 50 \text{ bar}$, $t < 15 \text{ s}$ and boost pressure min. 20 bar



The new Rexroth axial piston variable pump A10VGT Series 11 is particularly suitable for drum drives of concrete mixers.

Low weight – best in class

The Rexroth A10VGT Series 11 stands out from the crowd thanks to its low weight. This was achieved with a variety of construction measures and many years of application experience. The axial piston variable pump size 90 thus offers a weight advantage of approx. 13 percent and size 115 approx. 8 kilograms over comparable products (best in class).

Compact design – best in class

A significant advantage of the Rexroth A10VGT series 11 lies in its very compact design. The Rexroth A10VGT size 115 is approx. 28 millimeters narrower and has an approx. 15 millimeter lower overall height than comparable products available in the market. The installation length is between 301 mm and 317 mm.

Suitable to fulfill future, functional safety standards for concrete mixers in Europe

In the future, more stringent requirements for functional safety (prEN12609) will apply in Europe for concrete mixers and hydraulic units used as drum drives. To fulfill these safety requirements, the Rexroth axial piston variable pump A10VGT Series 11 is optionally available with special function elements (sequence valve, neutral position switch). The required reliability coefficients for functional safety are available for these elements and the proportional electric control (EP). The Rexroth A10VGT Series 11 can thereby be integrated into safety functions and makes a valuable contribution to meeting future safety standards for concrete mixers in Europe.