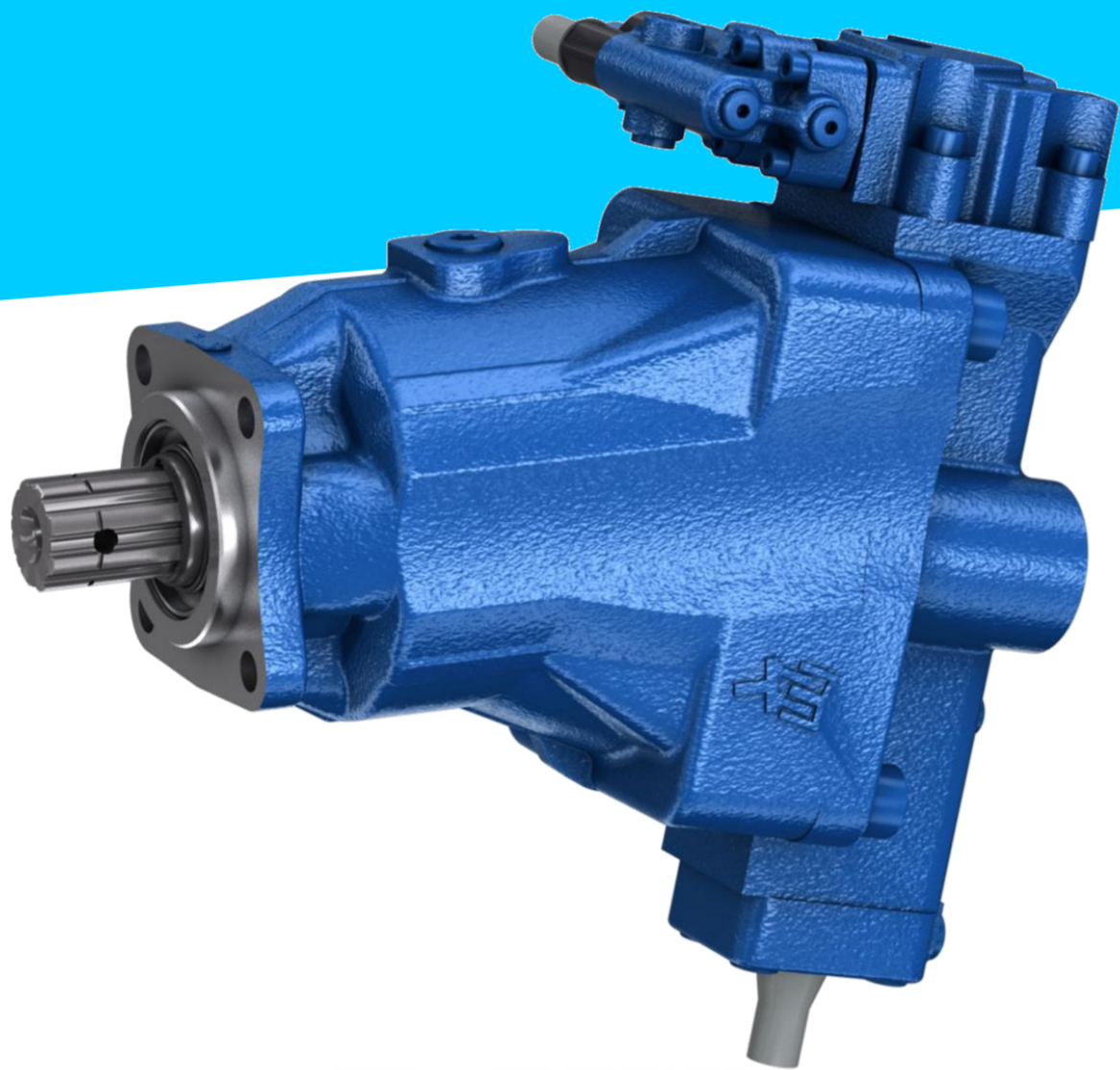


Axial piston variable pump

A18V(L)O series 11

High nominal pressure and stepless adjustment



Increasing performance demands on the working hydraulics of truck superstructures and stricter regulations regarding noise emission and pollution require efficient and powerful hydraulic pumps. In contrast to fixed pumps, the Bosch Rexroth variable truck pumps offer higher efficiency and an improved total hydraulic efficiency for truck superstructures leading to a considerable reduction in fuel consumption. In addition, high reliability and precise flow control are key factors for manufacturers of truck superstructures and end users. The axial piston variable pumps A18VO and A18VLO from Bosch Rexroth were developed particularly to meet the requirements of truck applications.

CUSTOMER BENEFITS

- Compact design and high power density
- Precise and stepless flow adjustment
- Low operating noise and high efficiency
- Good self-priming capacity and high speed limit
- Direct piston drive and high running smoothness
- Robust rotary group and long service life
- Easy replacement of hydraulic truck pumps of other manufacturers by Rexroth A18V(L)O

FUNCTION AND BENEFITS

Compact design and high power density

The tried and tested A18V(L)O axial piston variable pump of series 11 distinguishes itself from other variable displacement pumps for trucks by the bent axis design of its rotary group. The aluminum housing and the robust 7-piston high-pressure rotary group derived from the A6 or A7 offer high power density at low weight. The narrow housing design enables applications of the A18V(L)O in confined spaces next to the universal joint of vehicle drives.

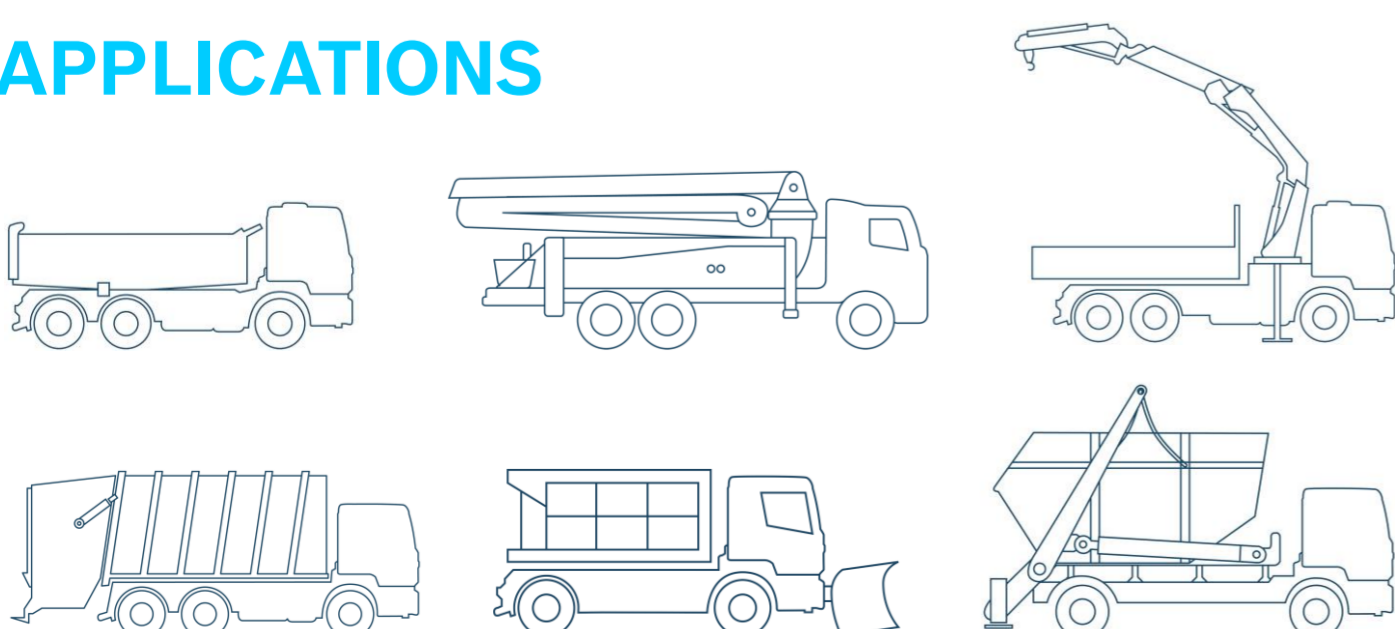
Precise and stepless flow adjustment

Stepless adjustment of the pump flow according to the actual need helps to reduce losses in the hydraulic system and the fuel consumption. The precise flow adjustment follows a given input signal with high dynamics and reduces the vibration forces of excitations from the hydraulic system.

Low operating noise and high efficiency

The noise grooves in the control plate are optimized towards the running direction of the pump and reduce pressure pulsation and the noise produced during the A18V(L)O's operation. The optimized reversing also contributes to an increase in efficiency.

APPLICATIONS



Axial piston variable pump A18V(L)O series 11
High nominal pressure and stepless adjustment

TECHNICAL DATA

Axial piston variable pump type A18VO / A18VLO series 11

Sizes:	55 cm ³ ; 80 cm ³ ; 107 cm ³ / 80 cm ³
Maximum pressure:	400 bar
Nominal pressure:	350 bar
Rated speed:	2150 rpm - 2500 rpm / 2240 rpm
Weight:	approx. 16 kg - 25 kg / 24.4 kg
Mounting flange:	Truck flange according to ISO 7653
Drive shaft:	Similar to DIN ISO 14
Working ports:	Inch threads according to DIN ISO 228
Installation length (incl. pressure nipple):	301 mm - 354 mm / 368 mm
Data sheets:	92270 / 92280



The Rexroth A18V(L)O series 11 is suitable for various truck applications.

EXPLORE MORE



A18V(L)O

Good self-priming capacity and high speed limit

In comparison with similar hydraulic pumps, the Rexroth A18V(L)O features an improved self-priming capacity and higher maximum speed. The basis for this are various structural measures, such as the spherical shape of the control plate and cylinder, improved compensation of transverse forces and the design without additional guide pins between the control plate and cylinder as well as the resulting increased cross sections of inlet openings in the hydraulic section of the pump.

Direct piston drive and high running smoothness

Unlike in conventional pumps, in which the cylinder is actuated via the drive shaft, the cylinder of the Rexroth A18V(L)O is actuated directly via the pistons. This direct conversion of the drive torque to hydraulic work minimizes losses due to mechanical friction. The noise emission of the A18V(L)O axial piston variable pump is reduced and smooth operation is improved.

Robust rotary group and long service life

The A18V(L)O is known for its resistance against contamination and, thanks to its highly robust rotary group, its long service life. For example, minor contaminations in the hydraulic oil are flushed out through the ring gap between the cylinder and piston without causing any major damage. Thanks to its durable design, the Rexroth A18V(L)O axial piston variable pump is the perfect solution for a wide range of truck applications.

Bosch Rexroth AG
Glockeraustraße 2
89275 Elchingen, Germany
Phone +49 7308 82-0
info.ma@boschrexroth.de
www.boschrexroth.com

© Bosch Rexroth AG 2021. All rights reserved, also regarding any disposal, exploitation, reproduction, editing, distribution, as well as in the event of applications for industrial property rights.

The data specified within only serves to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.