

# Axial piston pumps Type AKP up to 500 bar up to 0,3 cm<sup>3</sup>/rev

## Features

High overall efficiency at very low speed. Low noise. High speed range. Above-average lifetime. Optimal price / performance ratio. Continuous self lubrication and cooling through the inflow.



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## Applications

Particularly suitable for use where low flow rates and extreme speeds require a high overall efficiency.

## Principal construction

- 3- and 5 piston models
- valve controlled on pressure and suction side
- swash shaft with large dimensioned rolling bearings
- rotation possible in either direction

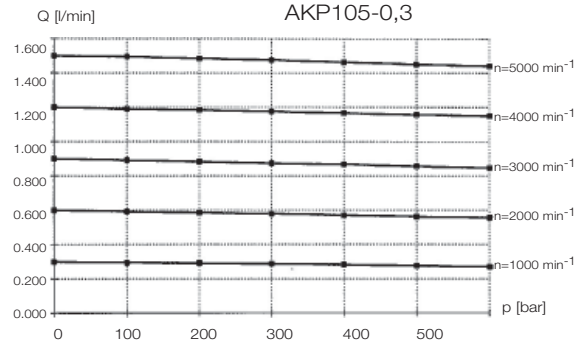
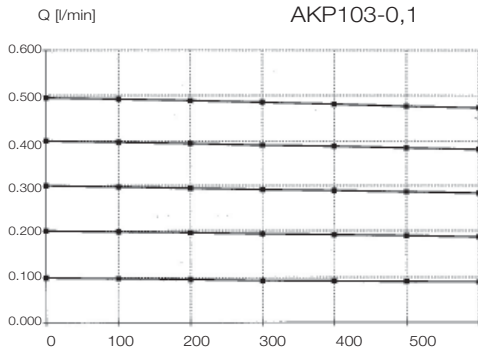
## Technical data

Type without flange	AKP103-0,1-500-P-A*00	AKP105-0,3-500-P-A*00
Displacement volume	0,1 cm <sup>3</sup> /rev	0,3 cm <sup>3</sup> /rev
Operating pressure	500 bar	500 bar
Peak pressure	550 bar	550 bar
Number of pistons	3	5
Hydraulic fluid	mineral oil according to DIN 51524 (other fluids on request)	
Fluid temperature range	NBR: -20 to 80 °C	
Ambient temperature range	-30 to 50 °C	
Viscosity range	5 to 220 cSt	
Speed	100 - 5000 rpm	
Filtration	according to NAS 1638, class 8 or ISO/DIN 4406 16/14	
Material	housing: light metal anodised pump head: steel blued	
Weight	0,9 kg	
Installation	any	
Flange 45911	to be ordered separately	

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## Characteristic

measured at  
v = 30 cSt, T = 40°C

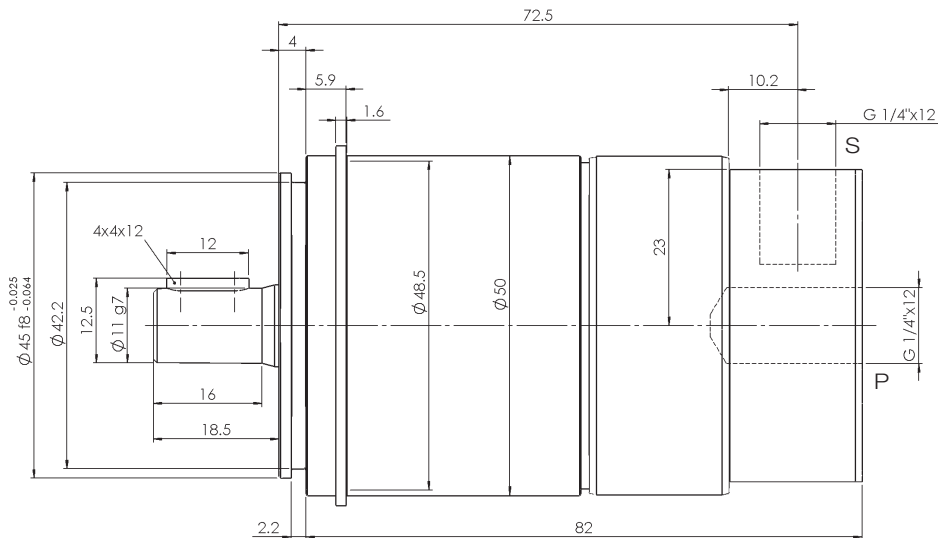


## Calculation of driving motor power

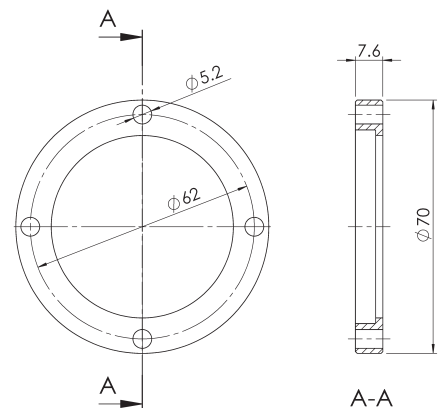
$$P = \frac{p \cdot V_g \cdot n}{\eta_t \cdot 612 \cdot 10^3}$$

P = Driving power [kW]  
p = Operating pressure [bar]  
V<sub>g</sub> = Displacement [cm<sup>3</sup>/rev]  
n = Speed [rpm]  
η<sub>t</sub> = Overall efficiency approx. 0,9

## Dimension drawing



## Assembling flange

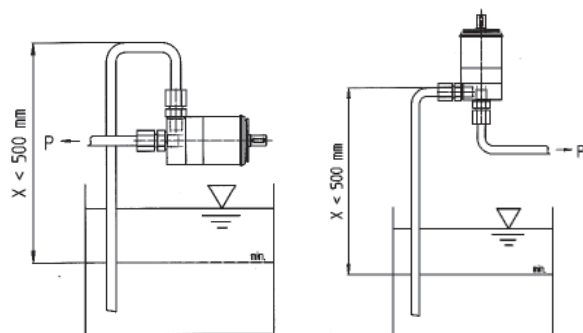


## Installation and commissioning

Self venting can be done by raising and lowering the pressure or by switching the motor on and off several times.

The venting time can be shorten through a prefilling.

Retaining ring 907016 included in delivery.



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Design and data subject to modification

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