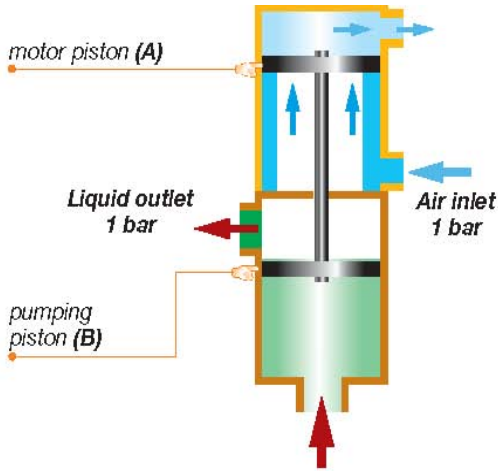


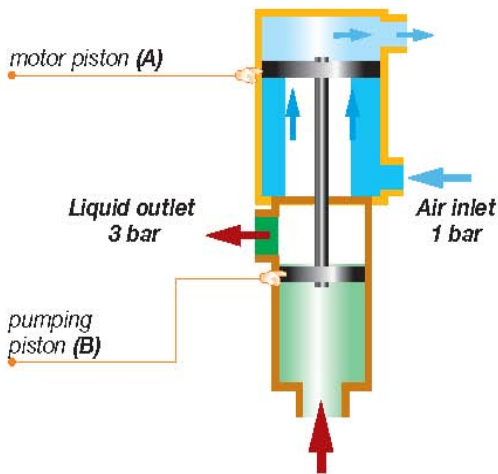
COMPRESSION RATIO

Compression ratio (R), is understood as the direct ratio existing between the pressure of compressed air feeding the pump and the pressure at which the fluid comes out.

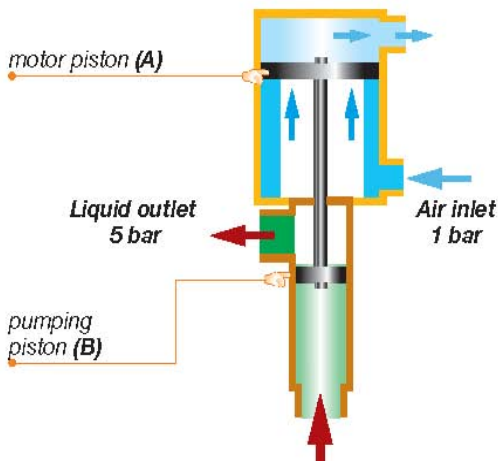
Inside the pump this compression ratio is obtained by the difference in diameter between the air motor piston A and the liquid pumping piston B.



R 1:1	Transfer (oil pump Art. 33094)
air piston ø 60	feed at 1 bar
pumping piston ø 60	oil outlet pressure 1 bar



R 3:1	Dispensing at short distances (oil pump Art. 35194)
air piston ø 60	feed at 1 bar
pumping piston ø 38	oil outlet pressure 3 bar



R 5:1	Delivery of high viscosity liquids at long distances (oil pump Art. 36094)
air piston ø 60	feed at 1 bar
pumping piston ø 28,5	oil outlet pressure 5 bar

It can be noted that the greater the difference between the pumping piston and the air motor piston, the greater the pressure of liquid delivered, but the lower the quantity (capacity). For example, in the grease pump with ratio 50:1, the diameter of the motor piston is 60 mm and the diameter of the pumping piston is 8.5 mm, the pressure of the grease coming out is 50 times higher than the pressure of the air feeding it.

APPROXIMATE CAPACITIES ON SYSTEM

The "relative" or "approximate" capacity was obtained by means of laboratory testing under the following conditions:

- for pumps ratio 5:1 and 3:1=

Pump with air feed at 6 bar; temperature 15°C with SAE 30 oil

- for pumps ratio 50:1 and 65:1=

Pump with air feed at 6 bar; temperature 15°C with NLGI #1 grease

