

T E C H N I C A L S P E C I F I C A T I O N S

Pumps:	Electrical or pneumatic
Number of greasing points:	Pump-independent, large systems possible
Control:	Electronic, electrical-pneumatic or pneumatic
Reservoir capacity:	2 to 200 kg
Output:	42 or 60 cc per stroke / 25 to 350 cc per minute
Grease pressure:	57 to 100 bar
Ambient temperatures:	-25 °C to + 80 °C (NLGI EP 0-grease)

For further information or any technical questions, please contact Groeneveld or your importer/dealer.

System monitoring

The pump-mounted grease pressure indicator enables visual checks to ensure proper system operation.

Systems using an electronic timer or PLC control can be fitted with a minimum level switch. The user will then be warned as soon as the grease has reached the minimum level, e.g. by a dash-mounted warning light or a buzzer.

Grease can be added to the grease reservoir with a manual or pneumatically operated filler pump.

Greases

The correct grease enhances the effect of automatic greasing. It is essential that the greasing properties of the grease match the

application in the best possible manner. With Greenlube, Groeneveld will ensure that this is the case. Greenlube is a specially developed series of 0-greases, in which the best properties of the various greases have been combined. Greenlube greases are available in pails and drums from 18 to 200 kg.

Professional installation

Groeneveld automatic greasing systems are supplied as complete installation kits per vehicle type or – for industrial application – as customized kits based on the number of greasing points to be connected. Groeneveld mechanics will install the systems for you, or instruct your workshop staff.

S I N G L E - L I N E 0 - G R E A S E G R E A S I N G S Y S T E M

Automatic greasing system for daily performance and efficiency

For several decades already, Groeneveld greasing systems have proved to be highly effective – particularly the single-line 0-grease systems with pneumatic or electrical pump. In the transportation sector and the industries, Groeneveld 0-grease systems are the leading systems.

Automatic greasing systems automatically grease every greasing point in a vehicle or machine, they monitor the greasing process and keep the driver or operator informed. Investments in automatic greasing provide immediate return with reduced operational costs and less equipment downtime.

As the pre-eminent specialist in the field, Groeneveld adds value to automatic greasing. Groeneveld greasing systems are



characterized by their robust construction, easy installation and practical monitoring and diagnosis features. Automatic greasing perfectly fits the trend for longer service

intervals and lower maintenance costs. The application of Groeneveld systems will also ensure superior reliability and the quickest return on investment.



The benefits of automatic greasing

Automatic greasing offers a wealth of benefits that make your investment more than just sensible – even with modern generations of vehicles.

Less wear

Grease reduces the wear of moving parts and provides an effective barrier against moisture and dirt. It also protects these parts against corrosion.

Greasing during operation

In comparison to manual greasing, automatic greasing offers major benefits. With automatic greasing, small quantities of grease are injected at regular intervals while the machine is in full operation. This results in the best possible grease distribution across the bearing surface, constant and good sealing and substantially lower grease consumption.

Lower greasing costs

Automatic greasing reduces preventive maintenance costs. Due to greasing during operation and the accurate and temperature-independent metering of the grease in every greasing cycle, grease consumption will reduce. Also, the grease can be purchased in larger quantities (pails/drums instead of cartridges), i.e. cheaper.

Comfort

Greasing points on vehicles and machines are not always easily accessible. Automatic greasing relieves drivers, operators and service

mechanics from the dirty – and sometimes even unsafe – manual greasing for once and for all.

Lower maintenance costs

Replacement or servicing of wear-sensitive parts is reduced to a minimum. Longer life of expensive parts results in a higher residual value of the vehicle or machine.

Increased reliability

Downtime or repairs as a result of insufficient or irregular greasing are a thing of the past.

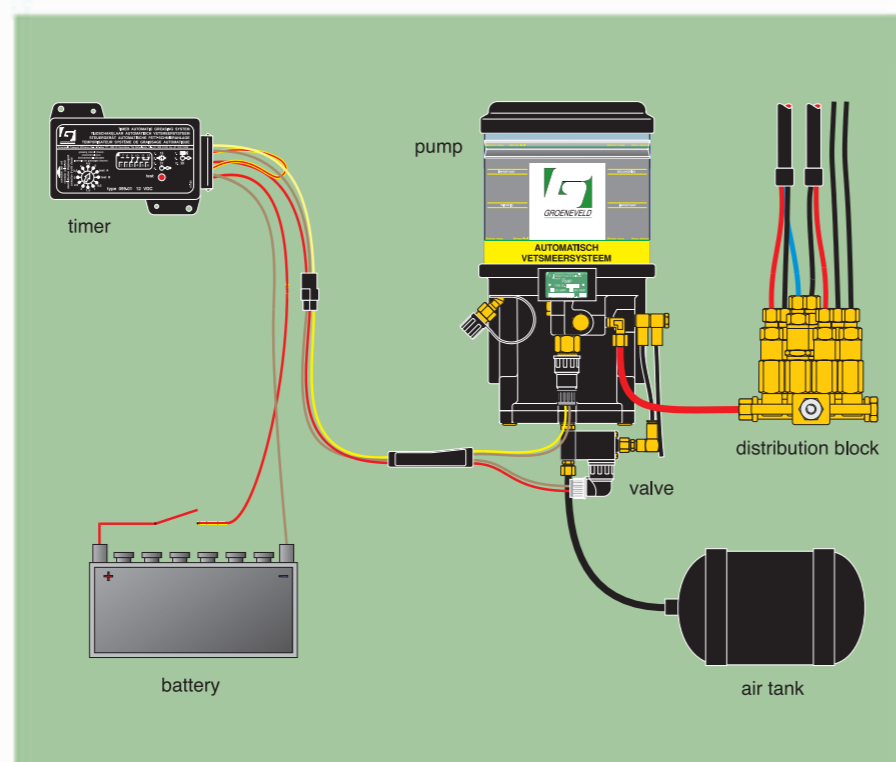
More environmentally friendly

Reduced grease consumption results in a reduction of environmental waste. It is also possible to use the system with

greases that do not contain graphite, molybdenum or Teflon, because grease used in automatic greasing systems does not need any 'emergency running' properties. Because of the closed construction of Groeneveld 0-grease systems and the use of a reservoir with follower plate, the systems are ideal for use with biodegradable greases.

Operating principle

The pump transfers the grease under pressure to the metering blocks with the metering units via the main line. The metering units dispense a pre-set amount of grease per greasing cycle, depending on the model. The grease is then moved under pressure through the secondary lines to the greasing points. Expansion of the number of greasing points is easy; just install



additional metering blocks or add metering units to the metering blocks already installed.

The metering units are made of stainless steel. Because of their closed construction, they are highly suitable for dirty or dusty environments. The secondary lines are either high-pressure hoses or thick-walled plastic or steel tubes.

Adjustable greasing cycle

Depending on the availability of constant voltage, a 0-grease system is fitted with an electronic timer or a brake counter. With larger industrial systems, it is also possible to use PLCs. In systems using an electronic

timer, the timer determines the interval and the duration of the greasing cycle.

The timers are available with interval times between 5 minutes and 50 hours and can be adjusted with increments between 5 and 300 minutes. All timers have been fitted with a readable memory and a buzzer or switch contact alarm.

Brake counter systems are available as fully pneumatic and electric/pneumatic model types.

On drawn equipment, such as trailers and semi-trailers, brake counters are used. The interval is adjustable and is related to the number of brake actions.

Grease reservoir with follower plate

The pump comes with a follower plate with draw spring in the grease reservoir as a standard feature.

The draw spring ensures that the follower plate follows the grease level.

The application of a follower plate offers major benefits:

- it prevents grease oxidation because there is no air contact
- it prevents condensation to mix with the grease
- it prevents funnelling; all grease is used up
- the reservoir wall remains clear, allowing easy visual level checks