

Electronically Controlled Oil System



ECOSY
Electronically Controlled Oil System



What is **perma ECOSY**?

The remarkable features of the compact Multi-Point Oil Lubrication System **perma ECOSY** are its clear construction and multiple functionality. The base of the body is the 7 liter oil tank. All of the unit's structural components are integrated in the base body. Up to 6 lubrication points can be supplied with oil by means of simple plug-in connections. The configuration of each outlet is user friendly, menu-driven with buttons and can be done on a multilingual display. Each outlet's discharge amount can be set individually and separately from the other outlets.

Sensors collect data about operating conditions and communicate with the lubrication system **perma ECOSY**. This ensures lubrication as needed. The integrated fill level monitoring sensor with a reserve indication in the display and signalling capability makes it easy to monitor the system. By simply refilling the oil reservoir, the **perma ECOSY** is ready to function again without requiring any other maintenance. Connection to a PLC or external machine is possible.

Features

Compact Construction



Benefits

- ⇒ Sturdy PE-housing
- ⇒ Reservoir and electronic housing in one compact, sturdy unit
- ⇒ Mains supply safely integrated in the housing
- ⇒ Pump integrated in the reservoir
- ⇒ Menu-driven configuration
- ⇒ Easy access to all connection points

Innovative Distributor Function

- ⇒ Selection of 1-6 outlets possible
- ⇒ High pressure build-up of up to 10 bar at each outlet
- ⇒ Individual supply of each lubrication point (dosage as required)
- ⇒ Easy installation with tubes to the lubrication point
- ⇒ Tubes up to 10 meters (depending on ambient temperature and oil viscosity)
- ⇒ Supply of oil viscosity between 65 - 2000 mm²/s (at 40 °C / 104 °F)



Pre-Configured Interfaces

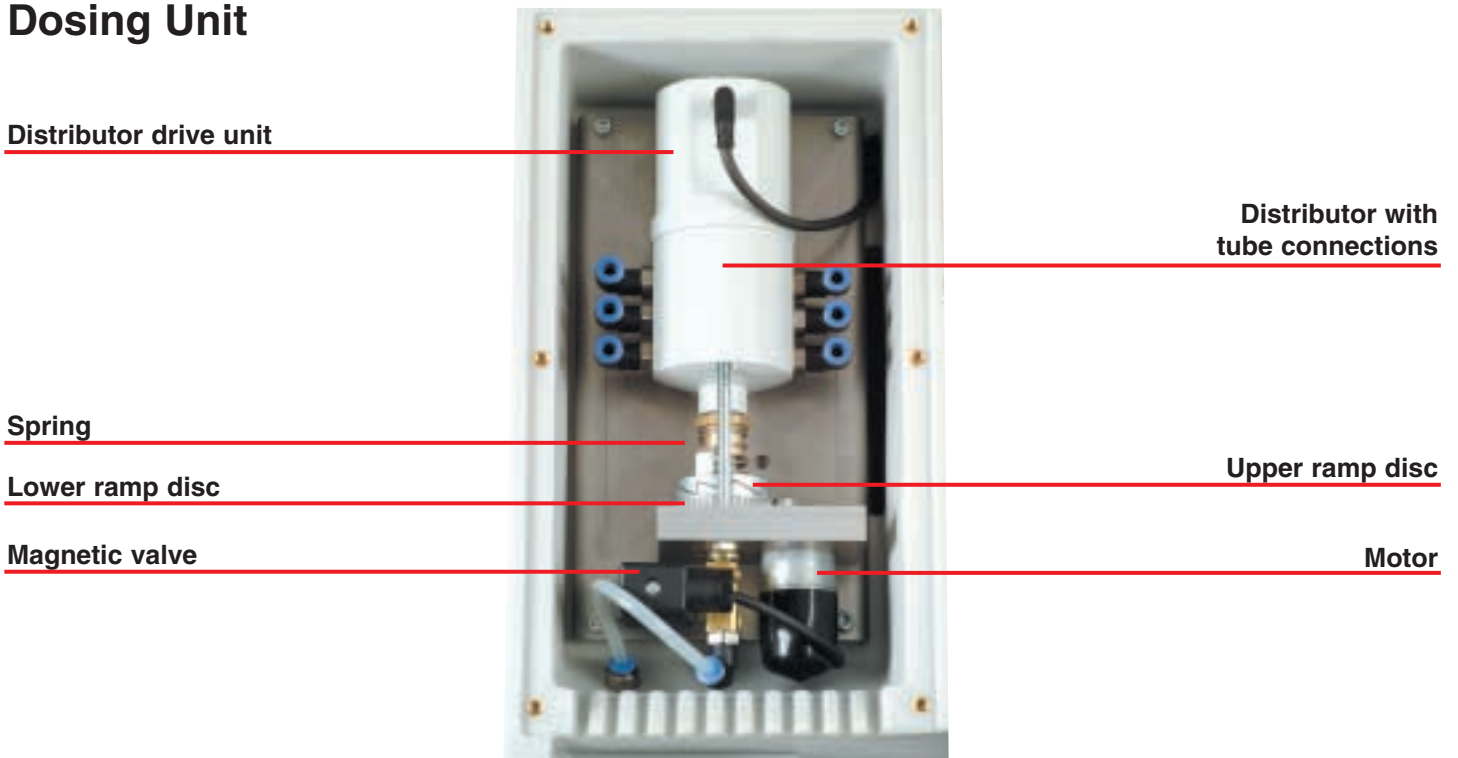
- ⇒ Connection to external equipment (PLC, contactor) possible
- ⇒ Signals of fill level and operating condition to external control systems possible
- ⇒ Independent freely programmable control unit

Inside View

ECOSY Housing



Dosing Unit





ECOSY Basic

Reservoir, pump, distributor and electronic unit

ECOSY Standard

Same as basic version plus fill level sensor and internal thermo sensor



ECOSY Exclusive

Same as standard version plus external thermo sensor and sensor for impulse control

Special Accessories

- Tubes
- Brushes
- Special brushes for step chains
- Connecting parts
- Mounting parts



Lubrication of Industrial Chains



Careful and effective lubrication of industrial chains is a prerequisite for reaching manufacturer's service life and optimal performance of the chain drives.

The linear shape of chains produces surface pressure between chain studs and bushings. Penetration of foreign substances and insufficient lubrication increase chain wear. Surrounding liquids or aggressive substances influence the operation of chains and will lead to corrosion and destruction of the slide surface when not sufficiently lubricated.

With its interval lubrication, **perma ECOSY** supplies all contact areas of chains with the correct amount of lubricant. Different speeds and lengths (constructions) of industrial chains are taken into consideration with adjustable lubricant amounts.

The advantages of **perma ECOSY** are a clearly visible wear reduction, as well as protection against corrosion and contamination.

perma ECOSY collects data about the chain's operating condition with its sensors and directs the discharge intervals according to individual requirements. The metallic friction between chain studs, bushings, rollers, and sprocket wheels will be reduced by building up a supporting lubricant film. Continuous re-lubrication ensures that the chain links are operated within a range of liquid- and mixed friction. The system minimizes friction and increases efficiency on up to 6 chain drives.

The economic operation of the Multi-Point Oil Lubrication System **perma ECOSY** increases the service life of chains and decreases maintenance costs.



Technical Data

Permitted operating temperature range

-20 °C to +60 °C (-4 °F to +140 °F)

Number of outlets

Standard 1 - 6

Tank volume

7 liters

Pump capacity

0 - 9999 ml / 1000 h
1 ml steps

Max. working pressure

10 bar

Filling

Manually refillable

Viscosity range

Oil 65 - 2000 mm²/s at 40 °C (104 °F)

Power supply

85 - 240 V AC 50/60 Hz

Tubes

6 / 4 mm

Input / output for PLC connection (25V)
(malfunction / reserve / machine on / off)

Sensor / Distance to inductive proximity switch (optional)

max. 6 mm

Features

- User-friendly operation via 4 display buttons
- Display with scroll-menu
- Low temperature shut-off displayed
- Reserve shown on display and reserve-signal output
- Display sensor function (alive) OK (sensor optional and exclusive)
- Sturdy metal drive unit
- Up to 6 outlets individually configurable via software
- Different display options (language, unit measurements)
- Selectable working mode (machine / time controlled)
- Malfunction indication via display and separate signal output

Note

The pump can be operated within above stated temperature range. The operating temperature depends on the lubricant. The stated pump capacity refers to oil viscosity 65 - 2000 mm²/s (+40 °C/104 °F), ambient temperature 20 °C /68 °F, without back pressure and 85 - 240 V AC 50/60 Hz rated voltage. Different pressure, temperature and voltage will change the pump capacity.

perma-tec GmbH & Co. KG

Hammelburger Str. 21
97717 Euerdorf – Germany

Tel. +49 (0) 97 04 6 09-0
Fax +49 (0) 97 04 6 09-55

www.perma-tec.de
e-mail: info@perma-tec.de