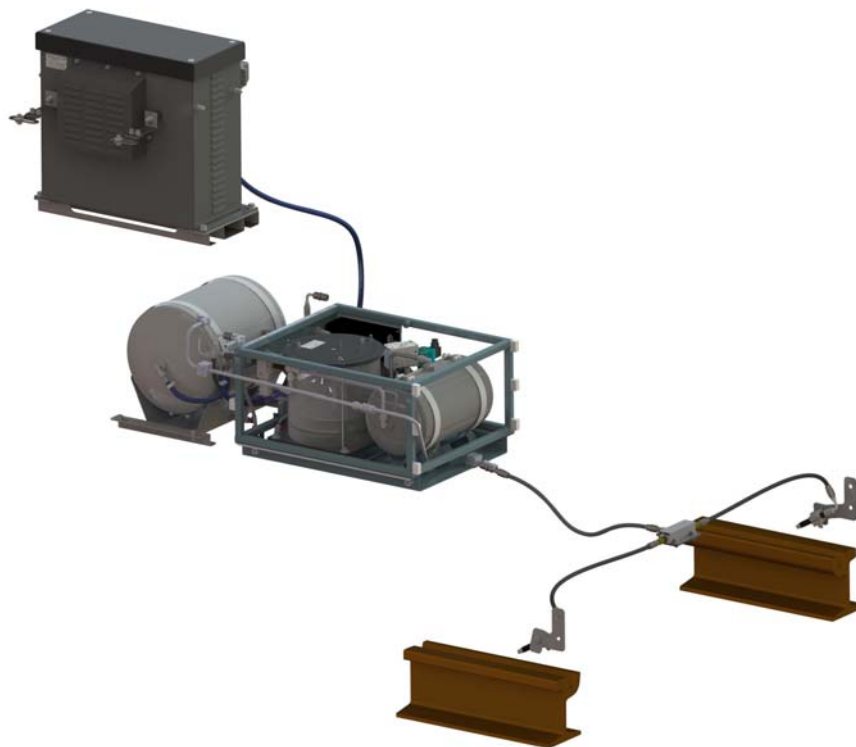


TOP OF RAIL LUBRICATION MR-01



- ✓ SIMPLE DESIGN, EASY OPERATION
- ✓ EASY INSTALLATION, FOR TOP OF RAIL LUBRICATION

Description

TOP OF RAIL lubrication is primarily used to decrease noise caused by rail traffic. Among other benefits of this type of lubrication are: decreased wheel and rail wear, which extends the intervals between tram down-time caused to re-profile wheels. As a result, this system decreases rolling resistance, which leads to energy savings. A friction modifier is used as lubrication, which is different from standard lubricants thanks to its content of soft metals. These additives provide friction between wheel and rail, avoiding the loss of traction and braking capabilities of trams. The system sprays a air and lubricant mixture onto the areas of contact of the top of rail and wheels. A thin film of lubricant is applied to the rails by nozzles, which use a highly pressurized mixture of lubricant and air.

An air compression unit supplies pressurized air and is located on the roof of the tram. The pressurized air is fed from the compressor to air tanks. The superior vehicle control of the tram operates the lubrication cycle and opens a solenoid valve followed a pneumatic piston pump that doses the correct volume of lubricant. This lubricant then flows into a mixing unit, where it creates a mixture, together with air. This mixture is then fed through a system of hoses and a divider into individual nozzles.

Technical parameters

Nominal voltage	24V DC
MAX current	25.5 A
Working pressure	4 ÷ 7 bar
Lubricant - type	biodegradable grease special designed for top of rail lubrication *
Lubricant viscosity class	NLGI-000, NLGI-00
Lubricant tank volumes	7 liters
Air tank volumes	35 liters
Nominal supplied quantity of lubricant	0.2 cm ³
Temperature	- 30°C up to +60°C
Degree of protection	IP 20
Weight	from 98 to 106 kg

* The list of recommended lubricants will be sent after making a request.

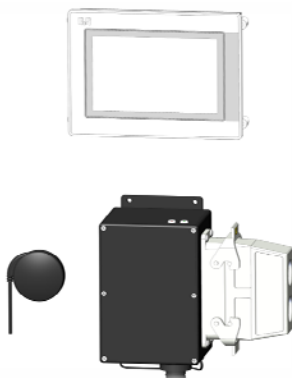
Advantages

- Electronic monitoring of minimum and maximum lubricant levels
- Modular design, capable of installation in other location
- Required pressure of lubrication mixture can be monitored
- Nozzles can be precisely directed
- The high-performance nature of the system allows for a high-frequency of lubrication, e.g. every rail bend.

New possibilities

Another ways putting Top of Rail lubrication into the operation:

- Control unit with GPS module - JMO



- Control unit TA-01



- Curve sensor SO-01

