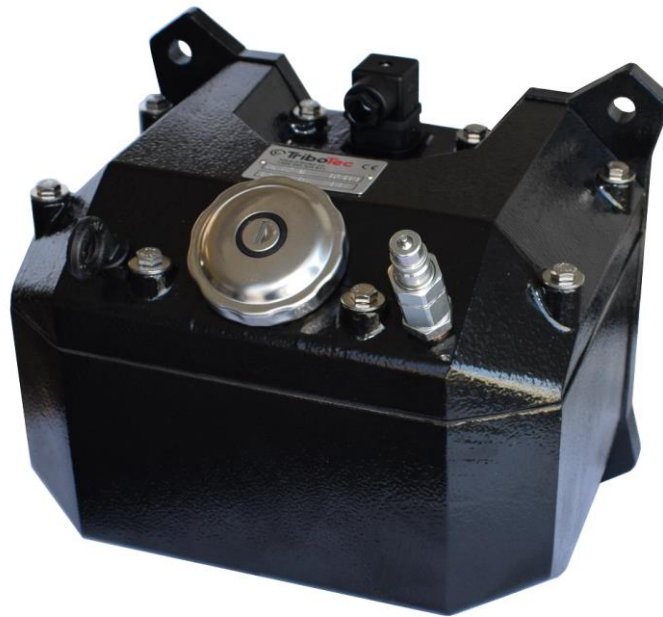


# WHEEL FLANGE LUBRICATION OK-02-F



## Description

The OK-02-F lubrication system is designed for wheel flange lubrication of rail vehicles, which are equipped with a source of compressed air. It is a modern lubrication system where lubricant dispersed by compressed air is applied directly to the contact areas of wheel flanges. From here it is transferred on the rail flanks. That reduces weariness of the wheel flanges and rails and also noise level from passing vehicle.

## Function

The pneumatically-operated piston pump is equipped with the lubricant tank and level sensor. From here, the lubricant dose is delivered by the working piston unit into a mixer unit, where mixture of the lubricant and pressured air is created. This mixture is further transported via system of hydraulic hoses and flow divider into individual spray nozzles, through which the lubricant is applied onto wheel flanges. Lubrication system works in cycles, which can be adjusted and optimized. All the functions are switched on by freely programmable operating system.

## Technical parameters

Maximum air pressure	10 bar
Working air pressure	4 ÷ 10 bar
Nominal voltage	24V DC, 48V DC, 110V DC, other upon request
Power input (solenoid valve)	10 W
Lubricant tank volume	6.5 dm <sup>3</sup> , 10.0 dm <sup>3</sup> , 13.0 dm <sup>3</sup>
Nominal dose	0.1 cm <sup>3</sup> / cycle
Lubricating cycle period	adjustable
Temperature range	-40°C up to +70°C
Lubricant	special lubricants for wheel flange lubrication of rail vehicles*
Lubricant consistency	soft grease NLGI 00, 000, others on request
IP protection	IP69

\* Biodegradable lubricants can be used. In case of using grease containing solid particles contact our specialists. The list of approved lubricants upon request.

## Operational modes

The OK-02-F system is provided with own electronic control unit or can be controlled by the vehicle's master control system. These ways of OK-02-F control are standardly possible:

- Time-dependent control. The lubricating cycle is activated after expiration of an adjustable time period.
- Distance-dependent control. The lubricating cycle is activated after an adjustable vehicle mileage with respect to vehicle speed (TA-01).
- Curves-dependent control. The lubricating cycle is activated on the base of signal of the curve sensor (SO-01).
- Position-dependent control. The lubricating cycle is activated according to a path signal or via specific position on the track. The GPS-based control system is possible upon request (JMO-01).

## Key benefits

- Wear reduction of wheels and rails.
- Reduction of noise from passing vehicle, especially at railway switches and on bends.
- Reduction of the drive power.
- Shortening of frequency and length of the vehicle's idle time due to repairs.
- Easy to apply, minimum maintenance requirements, low Life Cycle Costs.
- Economic grease consumption and using biodegradable grease, environmentally friendly.

## Dimensional drawing of the main system components

