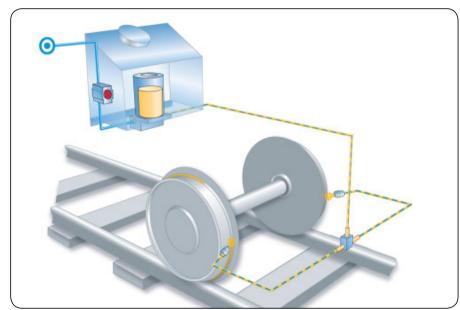
# SKF EasyRail Compact

# Single-line wheel flange lubrication systems



Modern rolling stock today are equipped with innovative wheel flange lubrication systems in order to reduce operating and maintenance costs and to enhance fleet efficiency. SKF EasyRail Compact, the onboard wheel flange lubrication system offered by SKF, reduces friction and wear to a minimum at both the wheel flange and rail infrastructure.



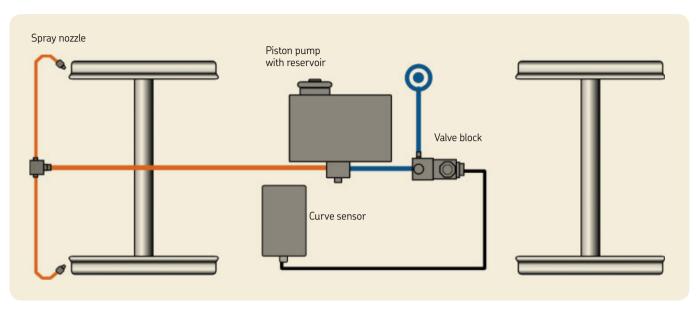
#### Advantages:

- Decreases operating costs, extending rolling stock lifetime and minimizing re-profiling efforts
- Environmentally sustainable due to lower operating noise emissions
- Ease of installation due to compact system dimensions
- Reduces material wear and tear
- Intelligent control unit can run multiple programs according to operator's specific requirements
- Precise mounting of light-weight spray nozzle near the wheel flange
- Operates with biodegradable lubrication
  products
- Saves traction energy up to 6%\*
- \* depending on train configuration and track conditions



# SKF EasyRail Compact system

## Introduction



#### Description of system

SKF EasyRail Compact single-line systems operate through homogenous lubricant metering. The dosage is already defined at the pump unit and compressed air is used as transport medium to move the lubricant via a flow divider towards the spraying nozzles from where the lubricant is evenly distributed on the wheel flange. Thus, only one line, carrying both the lubricant and compressed air at the same time, is installed. The air/lubricant mixture in the flow divider is split up into equal parts when the flow conditions prevailing in the outlet branches are similar. The steady supply of compressed air needs to be ensured.

#### Function

The SKF EasyRail Compact system consists of a piston pump with a lubrication reservoir, a flow divider and the respective spray nozzles. All moving parts were brought together in the lubrication module consisting of a piston pump with reservoir. This means the components are highly accessible and easy to service or replace. Moreover, neither the flow divider nor the spray nozzles have any moving parts, which considerably reduce maintenance time and expense. SKF EasyRail Compact systems can be used universally on all vehicle segments from urban transport to regional and intercity trains as well as locomotives.

#### Applications

- System with a max. line length of 7 m between the grease reservoir and spray nozzle
- Single pump solution for vehicles with a maximum of 10 m distance between the wheel sets to be sprayed
- Time, distance and/or curve dependent controls

#### Advantages

- Compact design
- Low life cycle cost
- Bottom-up lubricant recirculation
- Reduced installation efforts
- Works with oil and fluid grease with high percentage of solid additives

#### **Standard Components**

- Piston pump with reservoir 112-508-051
- Flow divider SV-8
- Spray nozzles 169-000-400 or 169-000-410
- Actuation via 2/2-way valve unit
- Curve sensor LCG2

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Please note the important information on product usage located on the back cover applies to all systems described in this brochure.

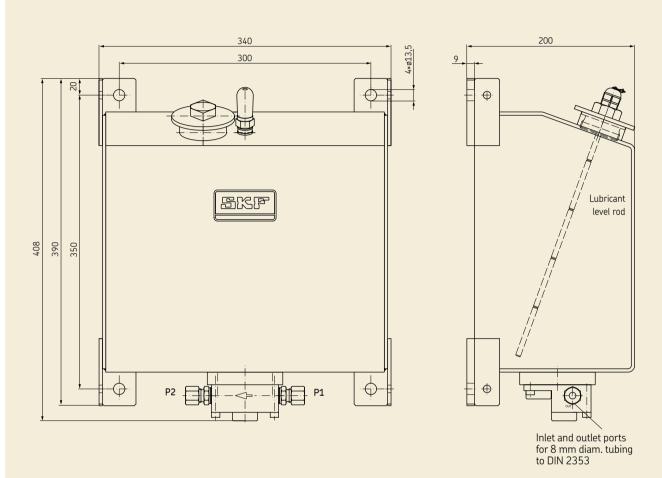
#### Technical data

Compressed air supply max. 10 bar
Service air pressure 6 to 10 bar
Standard reservoir capacity
Lubricant volume metered by the pump 0,05; 0,10; 0,20 or 0,40 cm $^3$ /spraying pulse
Duration of spraying cycles adjustable
Type of lubricants oil or fluid grease (also biodegradable)
Main supply

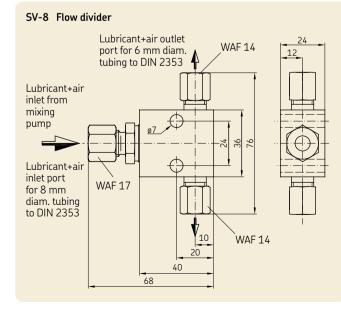
# SKF EasyRail Compact system

## Dimensions

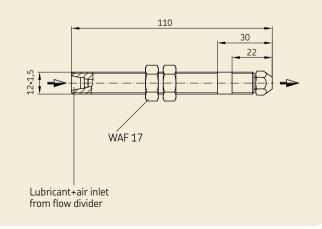
112-508-051 Piston pump with reservoir



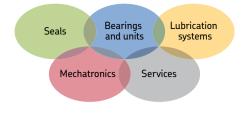
P1 = air line from compressed air network P2 = main line of system



169-000-410 Spray nozzle



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#### The Power of Knowledge Engineering

Drawing on five areas of competence and application-specific expertise amassed over more than 100 years, SKF brings innovative solutions to OEMs and production facilities in every major industry worldwide. These five competence areas include bearings and units, seals, lubrication systems, mechatronics (combining mechanics and electronics into intelligent systems), and a wide range of services, from 3-D computer modelling to advanced condition monitoring and reliability and asset management systems. A global presence provides SKF customers uniform quality standards and worldwide product availability.

#### Important information on product usage

All products from SKF may be used only for their intended purpose as described in this brochure and the operating instructions. If operating instructions are supplied together with the products, they must be read and followed.

Not all lubricants can be fed using centralized lubrication systems. SKF can, on request, inspect the feedability of the lubricant selected by the user in centralized lubrication systems. Lubrication systems and their components manufactured by SKF are not approved for use in conjunction with gases, liquefied gases, pressurized gases in solution, vapors or such fluids whose vapor pressure exceeds normal atmospheric pressure (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

In particular, we call your attention to the fact that hazardous materials of any kind, especially the materials classified as hazardous by EC Directive 67/548/EEC, Article 2, Para. 2, may only be filled into SKF centralized lubrication systems and components and delivered and/or distributed with the same after consultation with and written approval from SKF.

#### Additional brochures for further information

1-8090-EN	SKF EasyRail Lubrication Solutions - Segment brochure
1-8092-EN	SKF EasyRail Lubrication Solutions - Ordering brochure

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