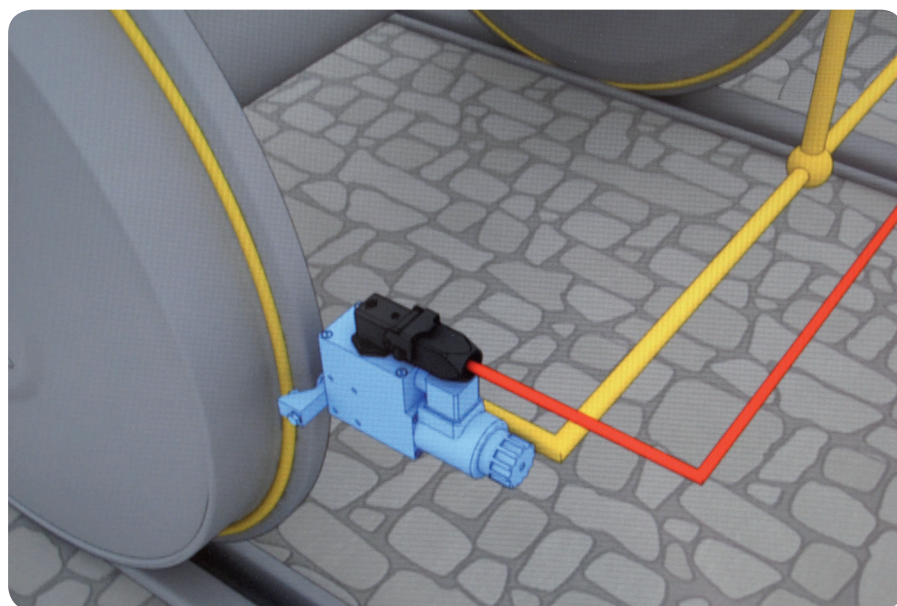


SKF EasyRail Airless

Single-line wheel flange lubrication systems without compressed air



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 Airless, the on-board wheel flange lubrication system offered by SKF, reduces friction and wear to a minimum at both the wheel flange and rail infrastructure.

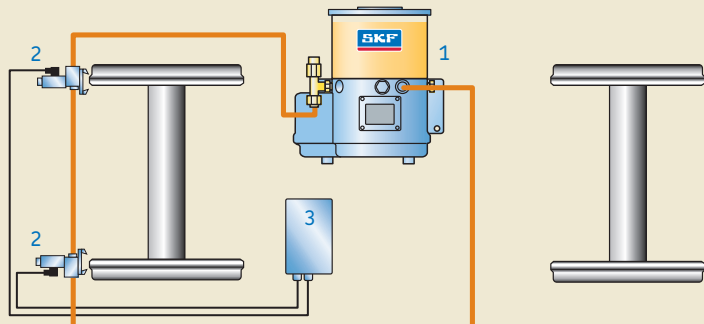
Advantages:

- 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 near the wheel flange
- Operates with biodegradable lubrication products

SKF EasyRail Airless

Introduction

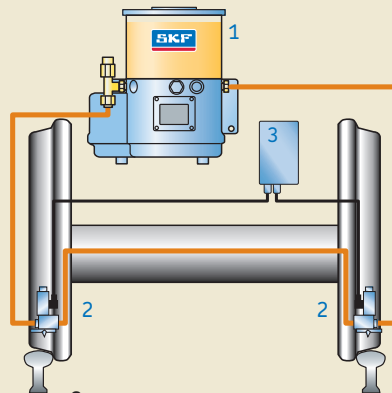
SKF EasyRail Airless – WFL
(Wheel flange lubrication)



Components

- 1 Pump unit with lubricant reservoir
- 2 Pump with spray nozzle
- 3 Control unit with curve sensor

SKF EasyRail Airless – TOR
(Top of rail lubrication)



Components

- 1 Pump unit with lubricant reservoir
- 2 Pump with spray nozzle
- 3 Control unit with curve sensor

Description of system

SKF EasyRail Airless single-line lubrication systems, operate through output of the lubricant via an electromagnetic pump, whereby the lubricants are applied in a defined quantity on the wheel flange without use of compressed air. The unit is equipped with a heating system to ensure the delivery of lubricant even under challenging weather conditions. Single-line systems, such as SKF EasyRail Airless, are used mainly on tramway or light rail vehicle (LRV) systems and metros where compressed air is not available.

Function

From a pump reservoir, the lubricant (oil or fluid grease) feeds the electromagnetic pump unit. When the electromagnet is turned on, the piston is actuated and a small volume of lubricant is delivered onto the inner and outer wheel flanges. This solution is a technical alternative to the solid stick lubricator. All components are developed according to a “smallest replaceable unit” concept and highly accessible, therefore are easy to service or exchange, which considerably reduces maintenance time and expense.

Applications

- Tram vehicles
- Light rail vehicles with a max. top speed up to 80 km/h (LRV)
- Metro

Benefits

- Very compact design
- Low weight
- No compressed air needed
- Exact lubricant metering
- Fitted for low temperature operations
- Works with oil and fluid grease also with high percentage of solid additives

Standard Components

- Lubricants reservoir and pump unit KFG
- Control unit and curve sensor LCG2
- Electromagnetic distribution pump PER-2

Technical data

Reservoir capacity	customized
Lubricant	oil/fluid grease
Viscosity	460 mm ² /s
NLGI grade	000, 00
Rated quantity	0,02; 0,04; 0,06 cm ³ / stroke
Permitted ambient temperature	-25 (with heater) to +45 °C
Rated operating voltage	24 V DC
Rated power input	105 W
Type of enclosure to EN 60 529/10.91	IP 65
Weight	1,2 kg
Numbers of operations	max. 2 / s

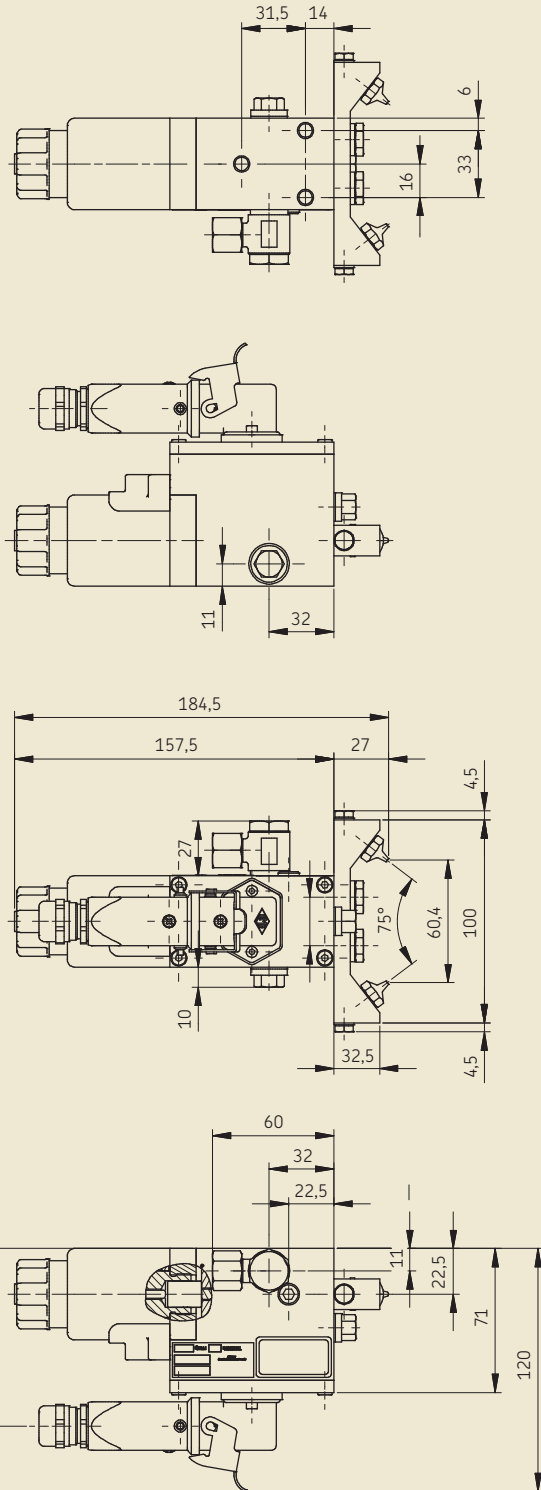
CAUTION

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

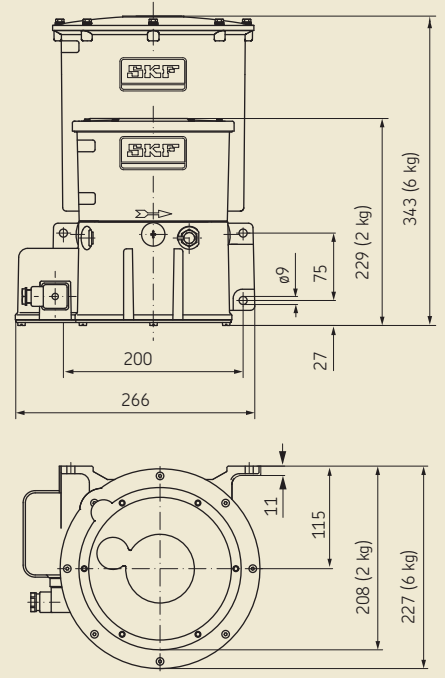
SKF EasyRail Airless

Dimensions

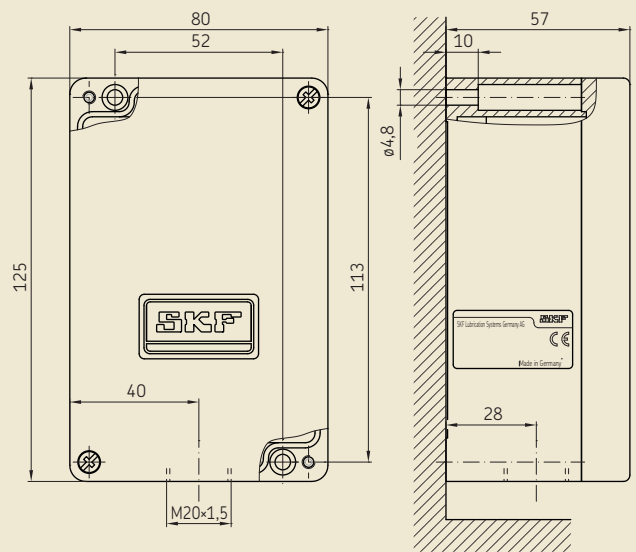
PER-2-20+924 Electromagnetic distribution pump

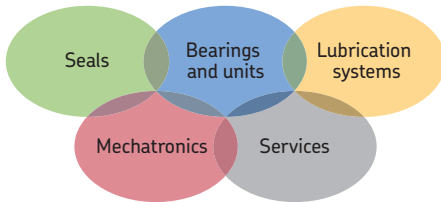


KFG reservoir pump unit



LCG2 control unit and curve sensor





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 world-wide. 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

1-2008-EN	<i>SKF EasyRail Intelligent mobile centralized lubrication systems</i>
1-3030-EN	<i>Piston pump unit product series KFG</i>
1-8092-EN	<i>SKF EasyRail System components</i>

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