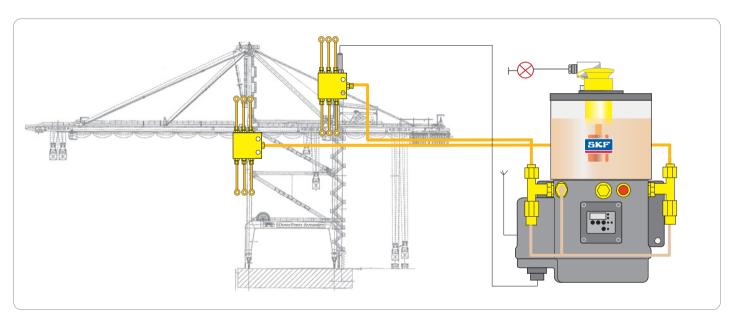
# Cable lubrication systems

for the lubrication of container and quayside cranes



The SKF pump unit KFGS for oil provides an economical entry-level version for cable lubrication systems. The sturdy and field-tested pump unit with integrated control unit and monitoring functions, if required, delivers the oil either directly (1 to 3 pump outlets) or via progressive feeders to the spray or drip points on the cable return rollers.

Thanks to the systematic piston metering technology, the specified metering volumes can be accurately adhered to during summer and winter, i.e. independent of the oil viscosity and the back pressure of the line. This prevents environmental pollution.

# System advantages

- Compact and sturdy unit with outstanding performance capacities
- Modular component system, system extensions at a later stage are possible
- Metering volume can be adjusted via the pump operation period and the selection of the pump elements
- Reservoir with filler screen and pressureregulating valve as standard; fill level and feeder monitoring optional
- For indoor and outdoor operation with power supply from either 90 to 264 VAC or 24 VDC
- Easy system planning and implementation
- Control unit with safety access code and nonvolatile memory (fail-safe). In the event of a fault identification, the pump

operation is interrupted and a fault message appears on the display. At the same time, a floating contact is connected and an integrated fault-hours counter activated.

- Can also be used for chain lubrication or in combination with application brushes
- Depending on the application, we can also implement customized solutions from our standard program with projection nozzles or so-called two-component nozzles (oil/ air) for single or multi-point lubrication.



# System layout

The control unit that is integrated in the KFGS lubrication pump adds up the running times of the cable reel drive. After a preset interval time, it triggers an adjustable pump operation period. The capacity of the pump elements (1–3) depends on the selected size and is 0.8, 1.3, 1.8, 2.5 or 5 cm<sup>3</sup>/min.

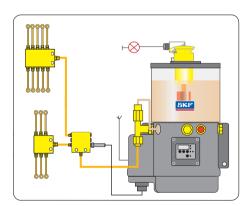
Should a fine distribution over several cables be required, the use of progressive feeders with 2 to 20 outlets is a useful supplement.

Usually, screw unions with a quick connector system  $\emptyset$  6 mm and  $\emptyset$  4mm are used to reduce assembly times.

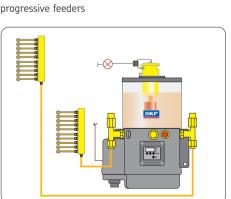
When lubricating the chain, we recommend oil application to the unloaded chain component to allow optimum penetration (creeping) of the lubricating oil into the chain link.



KFGS pump unit for oil, delivers the lubricant to the progressive feeders



Controlled lubricant distribution through progressive feeders



Uncontrolled lubricant distribution via manifold



VPBM feeder, measures the lubricant according to the required lubricant quantity



Lubricating quill, non-contact release of the required lubricant to the cable.

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# KFGS pump unit for oil

## Advantages

- Sturdy and reliable up to -25 °C
- Complete "all-in-one" pump unit with access coding
- Can be connected to any power supply from 90 to 264 VAC (24 VDC optional)
- With downstream progressive feeder and piston detector in self-monitoring design
- On request: CAN-Bus compatible

#### Technical Data

-please refer to leaflet no. 1-3030-US

Type KFG piston pump for oil with filler socket with strainer insert,
Pump element with pressure-

Pump element with pressureregulating valve p=40 bar, with return flow connection

Reservoir ......2, 6 or 10 kg

Reservoir material PA (2,6 kg) PMMA (10 kg)

Lubricant ... Oil, NBR-compatible Elastomers with an operating viscosity of 40 to 3000 mm²/s

Mounting position.....vertical

Ambient temperature range -25 to +75°C

Protection class .....IP54

Connection.....for pipe 6mm

#### Optional with:

- Control and monitoring unit, (design KFGS) transparent reservoir, volume 2, 6, 10 kg
- · Lubricant level switch for min. oil level
- Max. 3-pump-element setting
   0.8, 1.3, 1.8, 2.5 or 5 cm<sup>3</sup>/min with one pressure-regulating valve each
- Operating voltage
   12 VDC or 90 to 264 VAC, 50-60 Hz



KFGS pump unit for oil, with fill level control, pressureregulating valve with oil return, oil filler socket

# Progressive feeder VPBM

## **Advantages**

- Usable for the widest possible range of applications with regards to mode of operation (continuous/intermittent) and lubricants
- Central function monitoring of all feeder ports with a minimum of work
- Preset quantity distribution per cycle and outlet of 0.13 cm<sup>3</sup>
- Accurate lubricant distribution, even with back pressure at the lubrication points, due to fitted pistons
- The feeders are available with a maximum of 20 outlets
- Basic design galvanized, optional in stainless steel or seawater-resistant design

## Technical Data

-please refer to leaflet no. 1-3017-US

Type hydraulically controlled

Mounting position discretionary Thread connection: I/O M10x1

Ambient temperature range - 25 to + 110°C

Number of outlets 2 to 20

Hydraulic

Operating pressure max.: .......0il 200 bar Volume per outlet and cycle .....0.13 cm<sup>3</sup>

Lubricant ......Mineral oils, greases

based onmineral oil,

environment-friendly and synthetic oils and greases

Operating viscosity ...... > 12 mm<sup>2</sup>/s



Progressive feeder, type VPBM



Progressive feeder, type VPBM with piston detector

See important product usage information the on back cover.

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#### Order No. 1-3032-EN

Subject to change without notice! (07/2009)

#### Important product usage information

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

Not all lubricants are suitable for use in centralized lubrication systems. SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1013 mbars) by more than 0.5 bar at their maximum permissible temperature.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

#### Brochure note

1-3030-EN Reservoir pump units of the KFG series for industrial use

in oil or grease lubrication systems

1-3017-EN Block feeder VPB for the use in oil or

grease lubrication systems
1-0103-EN Fittings and accessories
1-0103-1-EN SKF plug-in connector

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