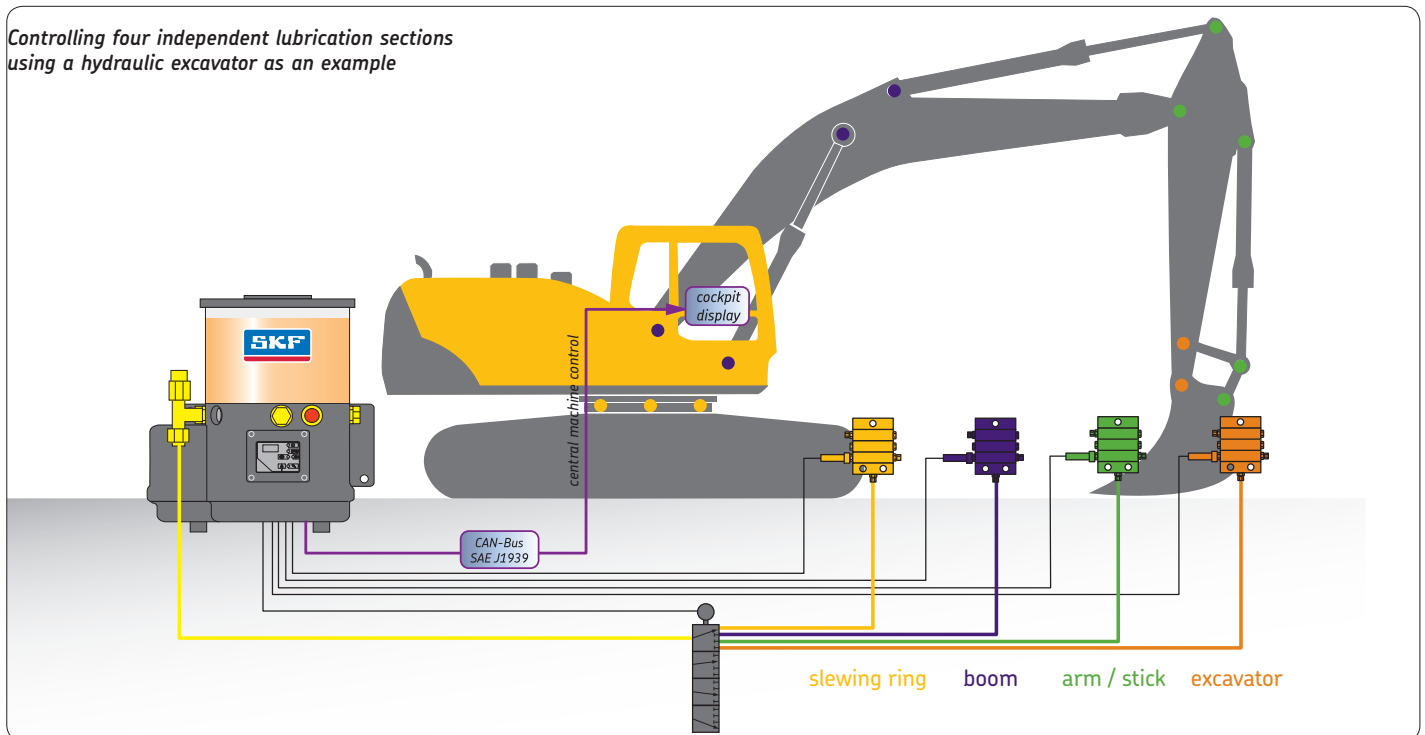


Automatic Lubrication System with CAN Control

Seamless system integration in on-board control using the CAN bus

Controlling four independent lubrication sections using a hydraulic excavator as an example



- Individual can adjust lubrication from the cockpit per lubrication section
- Increased machine availability, operational safety and efficiency
- Allows you to be informed and react immediately
- Fast and safe error detection for broken/torn cables or short circuits

Seamless System Integration

The automatic lubrication system with the LC-CAN 5000 control unit makes it possible to adjust lubrication of the various different sections of a machine to fit the actual load according to the principle: „As little as possible and as much as necessary“. This saves lubricant costs and protects the environment. Comprehensive system monitoring ensures that even small errors in the lubrication system are detected early and can be rectified.

CAN bus technology allows for dividing the lubrication system of a single machine into up to four independent sections that are all fed by a single pump unit. The individual sections are controlled using 2/2-way valves or one 5/4-electronic way valve DCV5-4 and functional monitoring is carried out using sensors (piston detectors). These immediately detect and notify of possible failures long before lack of lubricant results in bearing damage.

Electronic control and monitoring communicates with the on-board computer so as to fully integrate the lubrication system in the on-board service and status monitoring system.

As an alternative, the settings can be made or adjusted in the unit using an infrared remote control unit.

The system can be configured and parameterized via the central on-board display. Detected errors are then precisely displayed.

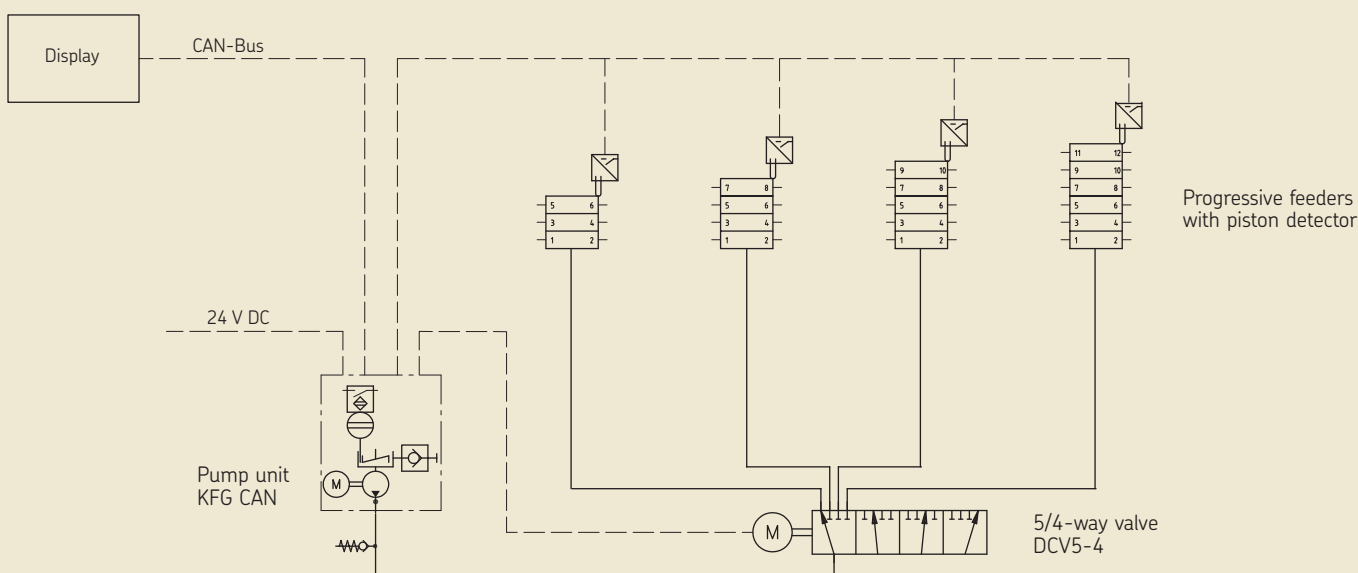
The error memory stores information as to whether, and for how long, the machine has continued to be operated despite displayed error notification (e.g. empty container).

This helps to identify any deficiencies during operation and maintenance and allows the parties to determine responsibility for any damages.

Features

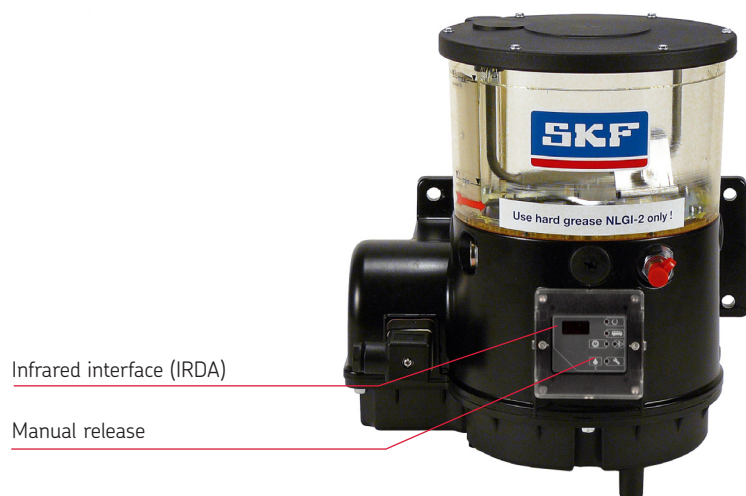
- Individual, from the cockpit adjustable lubrication per lubrication section
- Control unit works with CAN-Bus protocol SAE J3919
- Fast and safe error detection for broken/torn cables or short circuit
- Configuration and parameterizing via central machine control panel
- Error diagnosis memory with error log (date, time, type of error)
- Integrated infrared interface to remote control of the pump unit and/or memory read-out
- Compact and reliable technology for standard greases with NLGI grade 2

Maximized CAN bus system design with four sections



System components

Pump unit with CAN-Bus connection



Infrared interface (IRDA)

Manual release

Technical data:

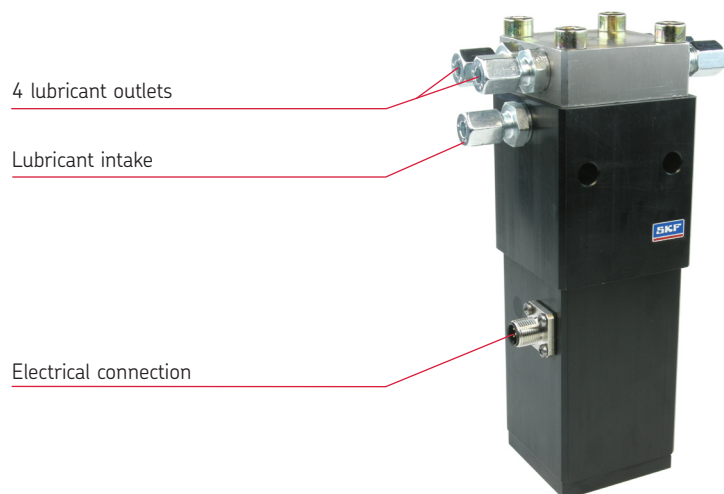
KFGS piston pump with agitator blade and integrated CAN-Bus control

Reservoir capacity: 2, 6, 10 kg
 Level switch: for min. filling level
 Lubricant outlets: 1...3
 Operating pressure: max. 300 bars
 Delivery rate/outlet: 0.8; 1.3; 1.8; 2.5 or 5 cm³/min
 Operating voltage: 24 V DC
 Lubricant: grease, NLGI grade 2

Accessories:

Pressure release valve,
 Level switches,
 Filling nipple, etc.

5/4-way valve DCV5-4



4 lubricant outlets

Lubricant intake

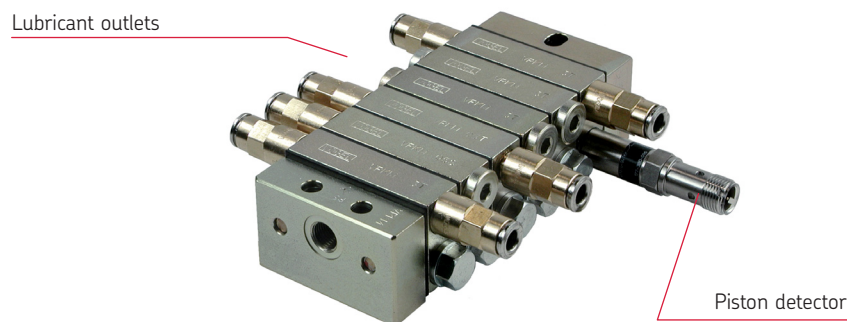
Electrical connection

Technical data:

5/4-way valve for up to 4 lubrication sections

Type: rotary valve for grease
 Operating pressure: max. 300 bars
 Operating voltage: 24 V DC
 Operating media: grease up to NLGI grade 2

Progressive feeder with piston detector



Lubricant outlets

Piston detector

Technical data:

Progressive feeder with piston detector

Model: VPM, VPBM, VPKM
 Type: piston detector with forced control
 Lubricant outlets: 2...20
 Metering volume: 0.05...1.2 cm³/stroke
 Operating pressure: max. 300 bars
 Piston detector: 24 V DC

Order No. 1-0992-EN

Subject to change without notice! (07/2009)

Refer to our leaflets:

1-8057-EN Centralized Lubrication Systems for Construction Machinery
1-9430-EN Progressive Systems for Commercial Vehicles

SKF Lubrication Systems Germany AG

Hockenheim plant

2. Industriestrasse 4 · 68766 Hockenheim · Germany

Tel. +49 (0)6205 27-0 · Fax +49 (0)6205 27-100

www.skf.com/lubrication

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