

# Hydraulic Lubrication Pump HS04

## for hydraulic hammers



- Adjustable quantity of lubricant
- Drive provided by excavator's hydraulic system
- Thanks to extremely wear-proof mating of the piston and bore specially suitable for lubricants containing high amounts of solids (chisel paste)
- Hydraulic control, so few mechanical parts
- Minimized number of seals
- Greater functional reliability
- Suitable for later installation and operation underwater
- Optimized suction characteristics
- Stable delivery rate even at low temperatures
- Practical screw-in grease cartridge with visual check of grease level
- Optional connection possibility without hose

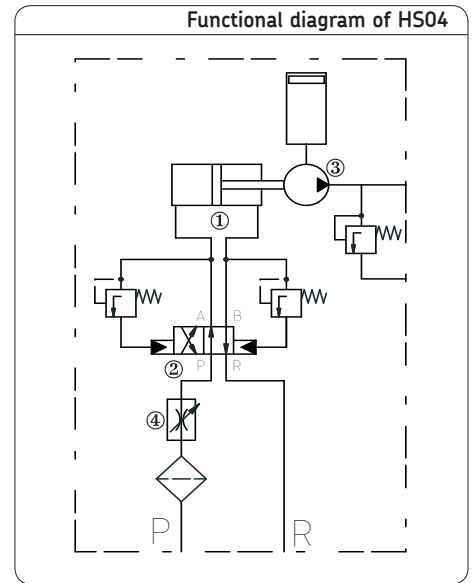
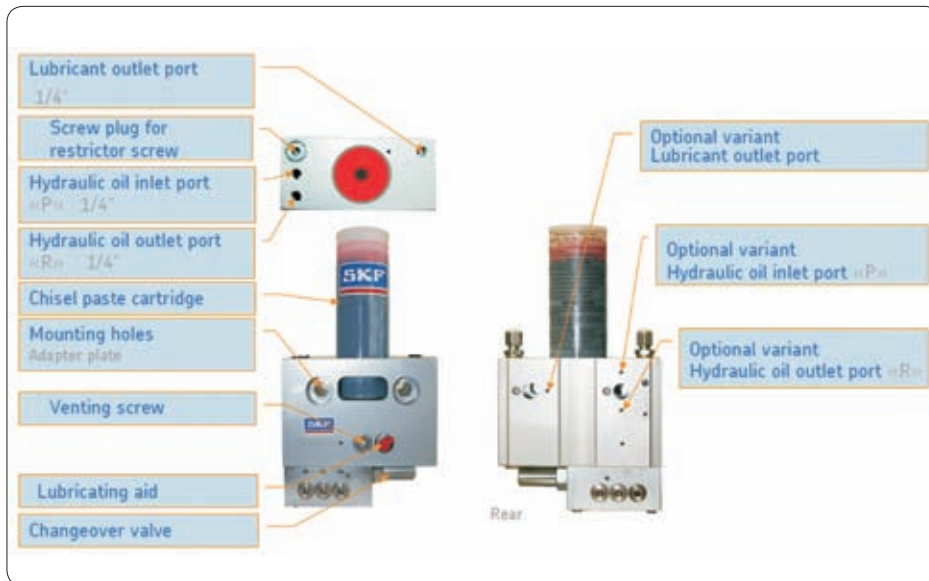


Hydraulic hammers require a different lubricant from the one used by the machine's other lube points. Moreover, they are frequently uncoupled and used at other machines. Reason enough to outfit each hammer with a compact chisel-paste lubrication system of its own. When the hammer is moved from one machine to another, it simply moves as well.

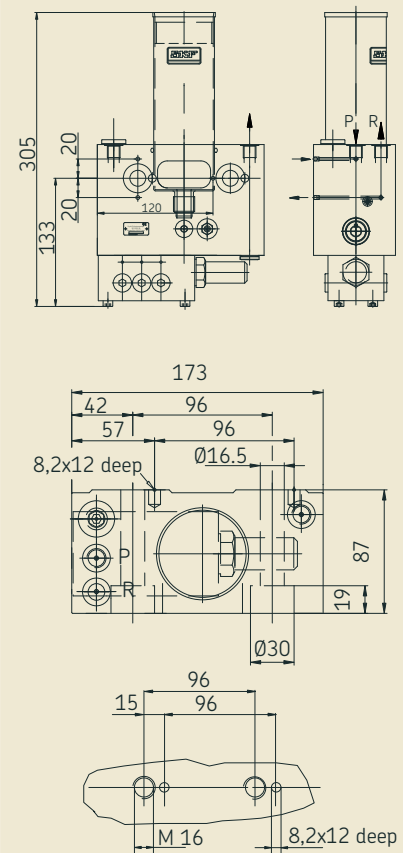
## Description of function

The HS04 Hydraulic Lubrication Pump is a hydraulically operated piston pump. The pump's drive is provided by its drive piston (1). The latter is pressurized on an alternating basis by the machine's hydraulic circuit via a hydraulic changeover valve (2). The pump's piston (3) is constantly in a suction or delivery phase as long as the machine and/or base carrier is in operation. As a result, the pump feeds lubricant to the base carrier's bearing

in pulses. When the hydraulic circuit is at rest, the pump comes to a stop and the lube pulse is interrupted. The delivery rate can be adjusted by way of a flow restrictor (4) and can be reset to meet the circumstances. A manual lubricating aid (lubricating nipple) on the front of the lube pump assures emergency lubrication of the base carrier in the event of a hydraulic circuit failure.



## HS04 dimensions



## Technical data

Cartridge: .....	0.4 kg
Lubricant: .....	max. NLGI-2
Delivery rate, adjustable: .....	<b>0.5.....3.0 ccm/min</b> (at a hydraulic pressure of 120 bars <sup>1)</sup>
.....	<b>1.5.....6.0 ccm/min</b> (at a hydraulic pressure of 200 bars <sup>1)</sup>
Set at plant for: .....	<b>1.4 ccm/min</b> (at a hydraulic pressure of 120 bars <sup>1)</sup>
.....	<b>3.0 ccm/min</b> (at a hydraulic pressure of 200 bars <sup>1)</sup>
Lubricant operating pressure: .... max.:	120 bars
Hydraulic operating pressure: ....	90 to 200 bars
Operating temperature: .....	- 25 to +75°C
Weight: .....	7.1 kg (including cartridge)

<sup>1)</sup> specific to SAE20W20 hydraulic oil at 40°C; service viscosity ~ 68 mm<sup>2</sup>/s

Easy handling due to



Easily adjusted delivery rate

The delivery rate is adjusted with an easily accessible throttle screw that is protected by a screw plug to protect it against dirt (see overview -page 2)

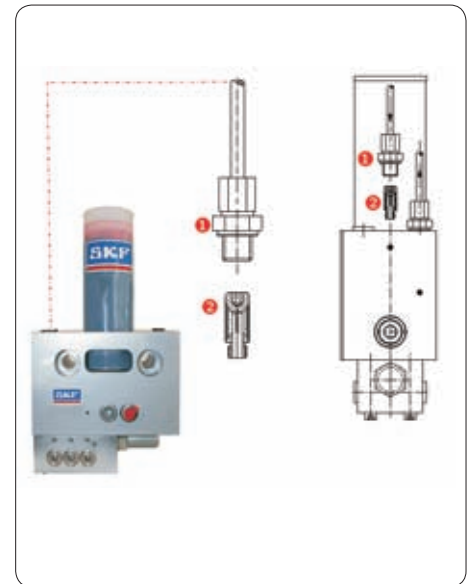
Easy cartridge change

- Switch off the hydraulic unit
- Screw old cartridge out
- Remove screw plug from new cartridge
- Screw new cartridge in

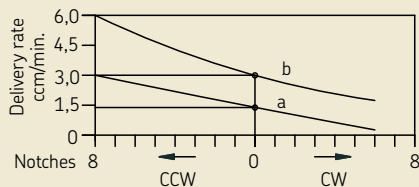


Easy cleaning of oil strainer

- Depressurize the hydraulic system on the base carrier
- Loosen and remove the hydraulic line leading to the hydraulic oil inlet port "P"
- Loosen and remove the 1/4" hydraulic connector (1)
- Screw oil strainer (2) out with a screwdriver
- Clean oil strainer (2)
- Reinstall cleaned oil strainer (2) and tighten with screwdriver
- Mount 1/4" hydraulic connector (1) and tighten
- Attach hydraulic line to the hydraulic connector and screw tight



Delivery rate adjustment



a) 120 bars hydraulic operating pressure  
 b) 200 bars hydraulic operating pressure  
 specific to SAE20W20 hydraulic oil  
 (at 40°C; service viscosity ~ 68 mm²/s)

Description	Order number
Hydr. hammer lubrication pump HS04G0/0001 incl 1 cartridge, 1 welding plate 2 screws M16x85 2 clamp sleeves	186-1231.31
Hose kit- consisting of: 3 high-pressure hose (DN 8- on both sides DKOL-M16x1,5), 1 x 1 m, 2 x 0.75 m, 6 straight connectors R 1/4-M16x1,5, 6 sealing rings	186-1232.01
Chisel paste, cartridge <sup>1)</sup> (Box of 12 pieces, 400g each)	3506-02-1122

*1) Cartridge is prefilled with special SKF chisel past. Use of other greases only after consultation.*

**Order No. 1-0337-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.

**Leaflets**

951-130-325-US Operating Instructions for hydraulic lubrication pump HS04

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[www.skf.com/lubrication](http://www.skf.com/lubrication)

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