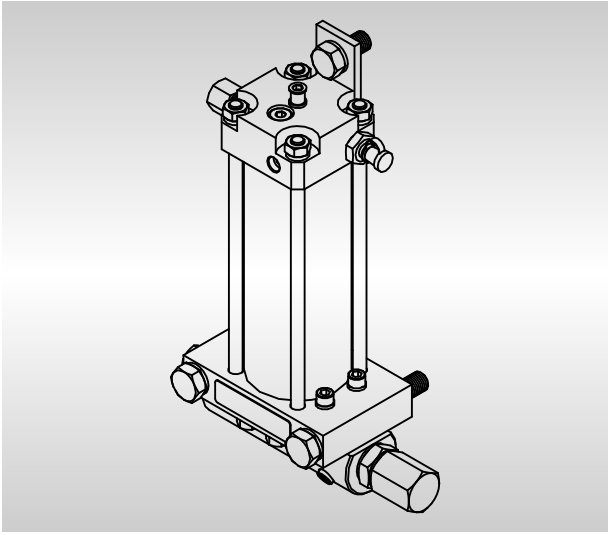
Description

The hydraulically driven grease pump BEKA HAMAX 11 is mainly used for the lubrication of hydraulic hammers or other attachments at construction machines.

The compact construction enables a direct assembly at the attachment.



Technical data

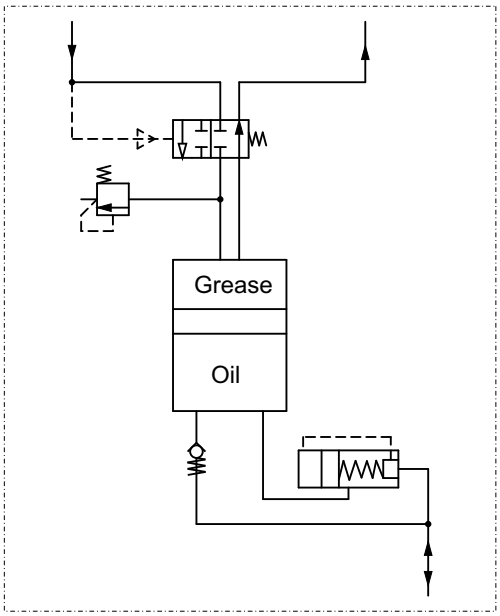
Drive:	hydraulic
No. of strokes:	1 stroke per pulse at hydraulic connection
Operating pressure:	min. 120 bar max. 300 bar
Counter press. of lube point:	max. 75 bar
Relief pressure:	max. 25 bar
Reservoir capacity:	100, 200 or 400 cm^3
Lubricant:	greases up to NLGI-cl. 2
Output rate:	0 or 0,25 to 1 cm^3/stroke
Output rate regulation:	infinitily variable (regulation distance 6 mm)
Operating temperature:	-25 °C to +80 °C (with suitable grease)
Filling:	need connection to hydraulic system

Installation position:
level indication pin showing upwards

Weight (without lubricant storage):

at reservoir capacity 100 cm^3:	4,5 kg
at reservoir capacity 200 cm^3:	4,9 kg
at reservoir capacity 400 cm^3:	5,7 kg

Diagram



Subject to alterations!

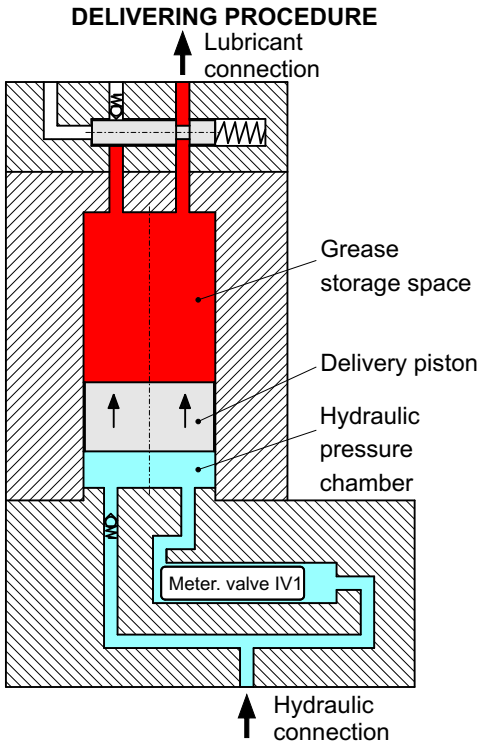
BAIER + KÖPPEL GmbH + CO PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
POSTFACH 1320 D-91253 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

Functional description

The hydraulic pump HAMAX system 11 is designed in a way that a lubrication process is made with each hydraulic pulse, e.g. actuation of the hydraulic hammer.

When the hydraulic connection (fig. 1) is pressurized, the hydraulic oil is metered in the adjusted quantity and passed on into the hydraulic pressure space.
The metered oil amount now shifts the delivery piston in the direction of the grease reservoir in the relation 1:1. The displaced grease amount is pressed out of the grease connection.

Fig. 1:



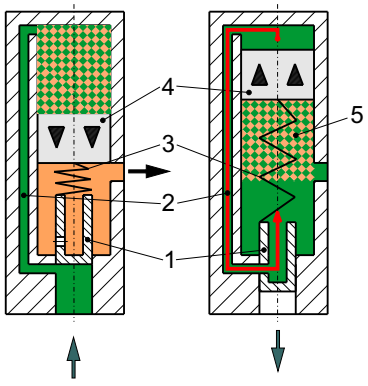
Function of hydraulic control

The regulation piston (fig. 2; pos. 1) is pushed upwards against the pressure of the return spring (fig. 2; pos. 3) by the hydraulic pressure, and opens the pressure line (fig. 2; pos. 2). The connected hydraulic pressure shifts the metering piston (fig. 2; pos. 4) downwards and displaces the hydraulic oil in the metering space (fig. 2; pos. 5).

When the hydraulic line is relieved, the return spring (fig. 3; pos. 3) pushes the regulation piston (fig. 3; pos. 1) back into its original position and opens the pressure line (fig. 3; pos. 2). With the pressure relief the metering piston (fig. 3; pos. 4) now can be pushed upwards by the return spring (fig. 3; pos. 3). The replaced hydraulic oil fills the metering space (fig. 3; pos.5) again through the opened pressure line (fig. 3; pos. 2).

Fig. 2
Filling and output

Fig. 3
Rearranging



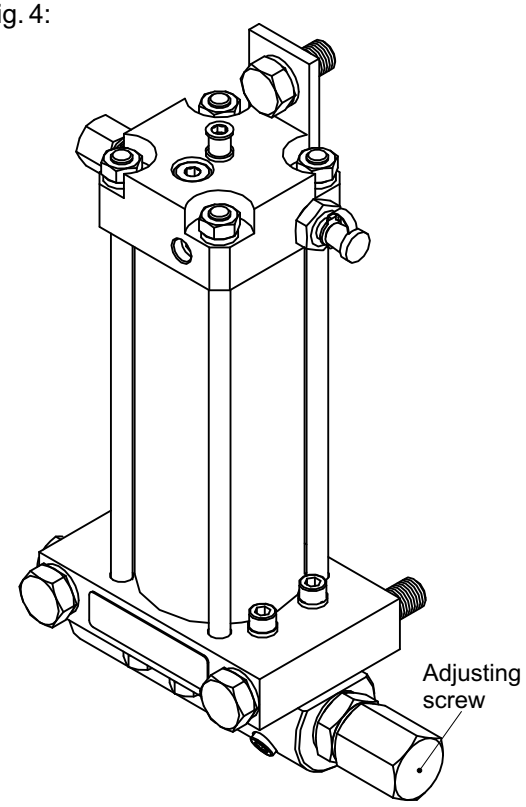
BAIER + KÖPPEL GmbH + CO PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
POSTFACH 1320 D-91253 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

Adjusting the output rate

The pump is adjusted to max. output rate at delivery.

The output rate is infinitily variable from 0,25 cm³ up to 1 cm³ at the adjustment screw (fig. 4 or fig. 6, pos. 3).

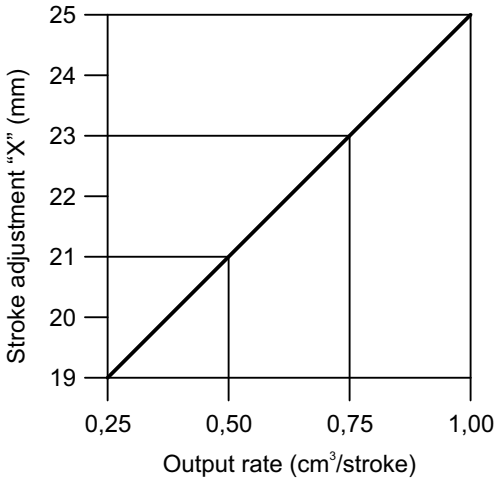
Fig. 4:



The total setting range is 10 mm (see fig. 6).

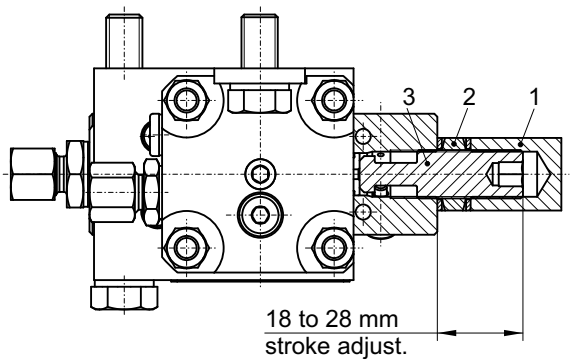
This corresponds to approx. 0,125 cm^3 per 1 mm setting range or per rotation of the set screw (see fig 6). The output rate can be adjusted within a range of 22 to 28 mm (adjustment distance 6 mm). 1 mm or 1 turn at the setting screw corresponds to 0,125 cm³ (see fig. 5).

If the stroke adjustment is set to 18 mm (see fig. 6) the output rate is 0 cm³.



Remove the protection cap (fig.6; pos. 1) and loosen the lock nut (fig. 6; pos. 2) for adjusting the delivery rate.
Now you can adjust the desired output rate according to the diagram (fig. 5).

When the output rate is adjusted, you have to secure the set screw with the lock nut (fig. 6; pos. 2) again.
After that, fix the protection cap (fig. 6; pos. 1) again.



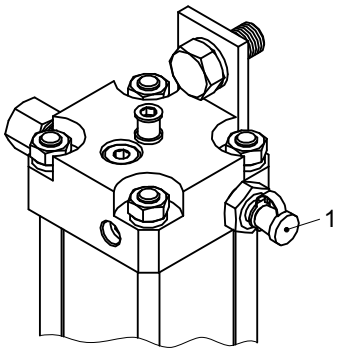
Subject to alterations!

BAIER + KÖPPEL GmbH + CO PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
POSTFACH 1320 D-91253 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

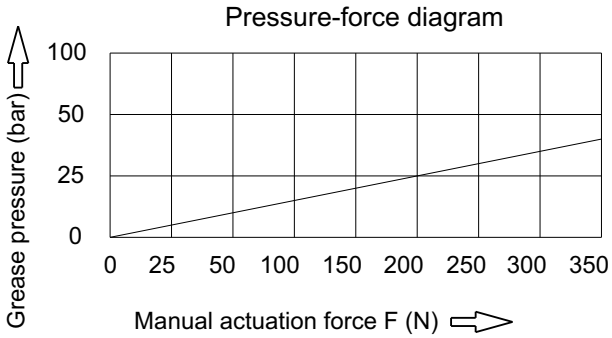
Filling of the pump

The pump is filled via the filling nipple (fig. 7, pos. 1) by means of a hand lever press (fig. 8).

Fig. 7:



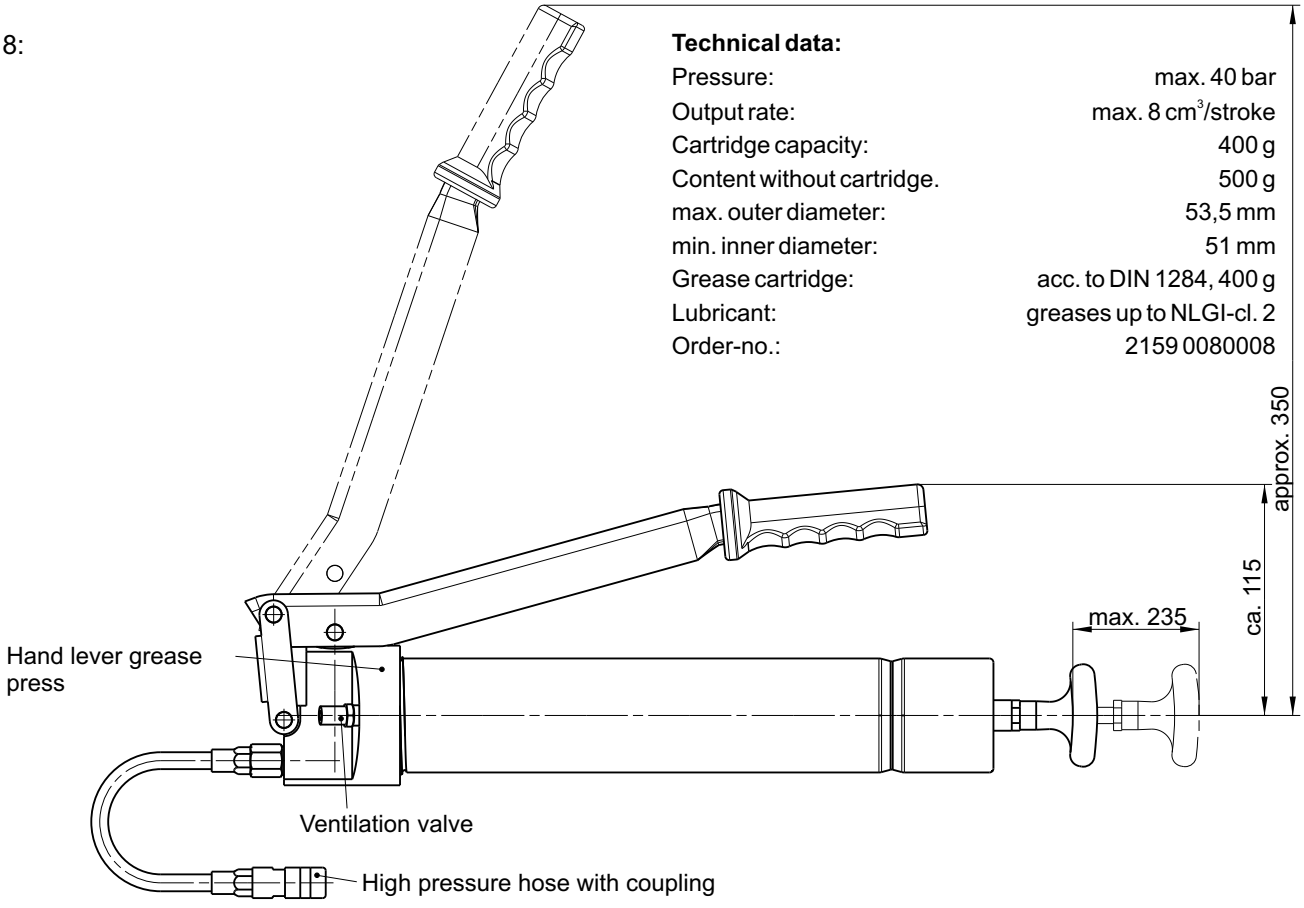
Hand lever grease press



We developed a hand lever grease press with a higher delivery capacity for this purpose (fig. 8).

With this hand lever grease press the pump can be filled with the same effort but only 1/4 of the pressure strokes of a normal grease press.

Fig. 8:



Technical data:

Pressure:	max. 40 bar
Output rate:	max. 8 cm^3/stroke
Cartridge capacity:	400 g
Content without cartridge.	500 g
max. outer diameter:	53,5 mm
min. inner diameter:	51 mm
Grease cartridge:	acc. to DIN 1284, 400 g
Lubricant:	greases up to NLGI-cl. 2
Order-no.:	2159 0080008

BAIER + KÖPPEL GmbH + CO PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
POSTFACH 1320 D-91253 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

Installation

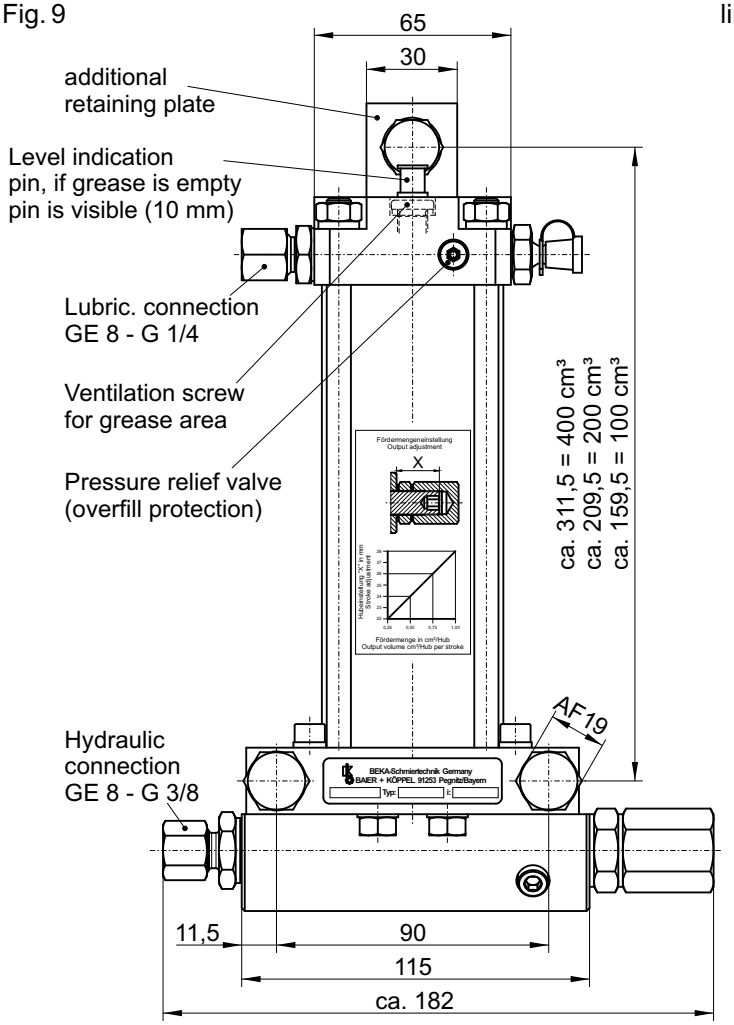
The pump is fixed at the attachment with two fastening screws at the additional device (fig. 9). Special lock washers prevent them from loosening. With the additional retaining plate, the pump can be fastened at a third point.

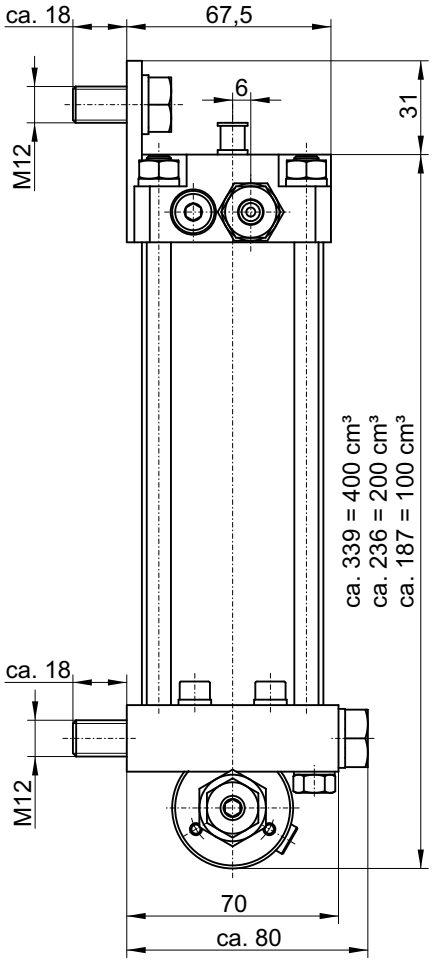
Connection

The hydraulic connection of the pump (fig. 9) can be connected via a bypass line to the hydraulic system of the supporting device.

The lubrication point has to be connected with the pump's lubrication connection (fig. 9) via a pressure line.

Fig. 9





Order key for series 2592

				2592 20 01 01 1 000
Type-no.	2592			
Code-no.	2592			
Reservoir capacity (cm³)	100	200	400	
Code-no.	10	20	40	
Hydraulic connection	G 3/8, Ø 8			
Code-no.	01			
Lubrication connection	G 1/4, Ø 8			
Code-no.	01			
Additional retaining plate	without	with		
Code-no.	0	1		
Special version	standard			
Code-no.	000			

Subject to alterations!

BAIER + KÖPPEL GmbH + CO PRÄZISIONSAPPARATEFABRIK | BEETHOVENSTR. 14 D-91257 PEGNITZ | POSTFACH 1320 D-91253 PEGNITZ | TEL.: +49 9241 729-0 FAX: +49 9241 729-50 | WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de

Hammer lubrication pump HAMAX 11

20-1-10-06 state: 03.12EN

BAIER + KÖPPEL GmbH + CO PRÄZISIONSAPPARATEFABRIK
BEETHOVENSTR. 14 D-91257 PEGNITZ
POSTFACH 1320 D-91253 PEGNITZ
TEL.: +49 9241 729-0 FAX: +49 9241 729-50
WEB: www.beka-lube.de E-MAIL: beka@beka-lube.de