

## 4.0.1 Steering

### Contents, Steering

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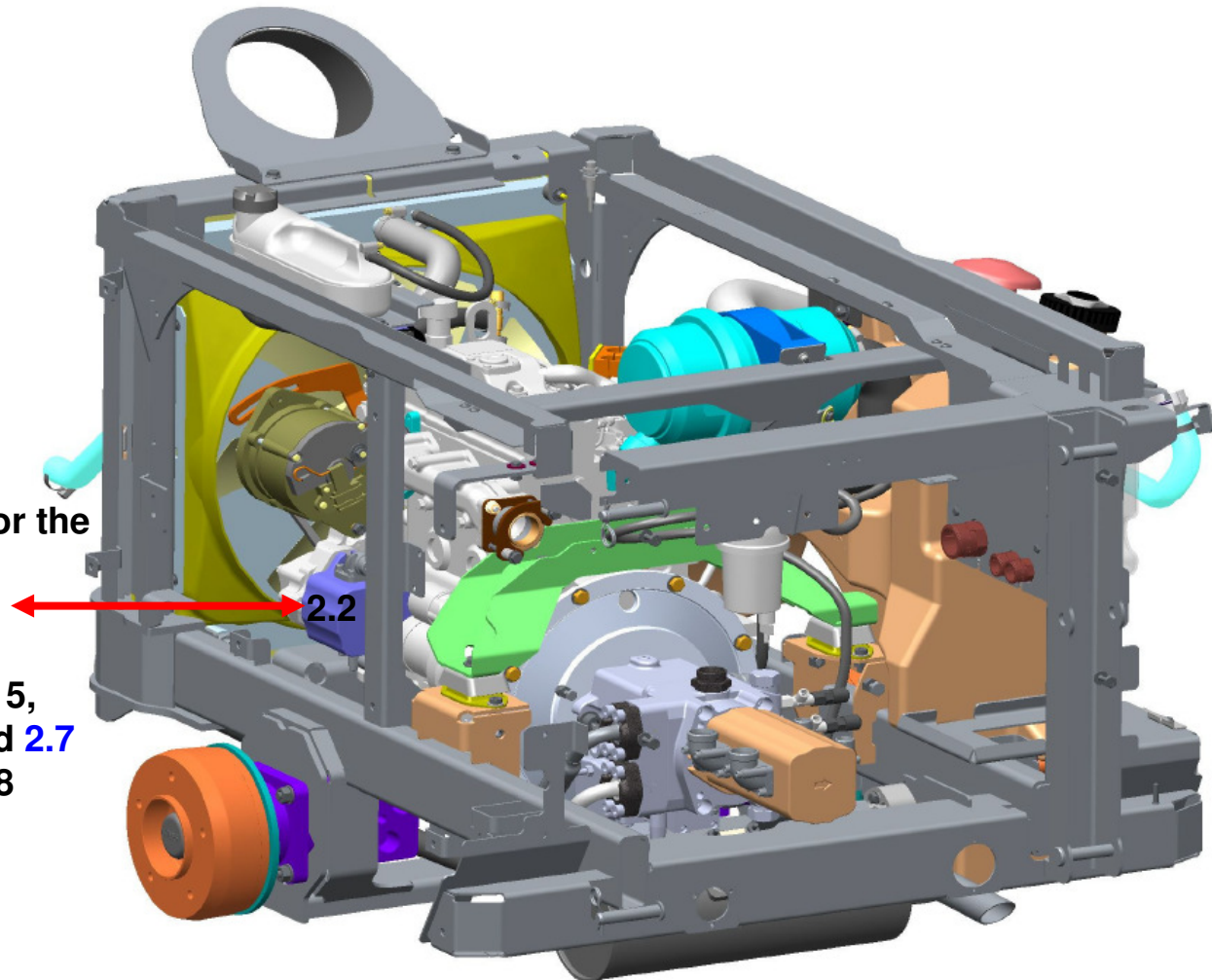
## 4.0.1 Steering

### Gear pump 2.2 (steering) in rear carriage of the CM 600

**Gear pump 2.2** (11.0 ccm)  
Flow rate 10 to 25 l hydraulic  
oil/minute.

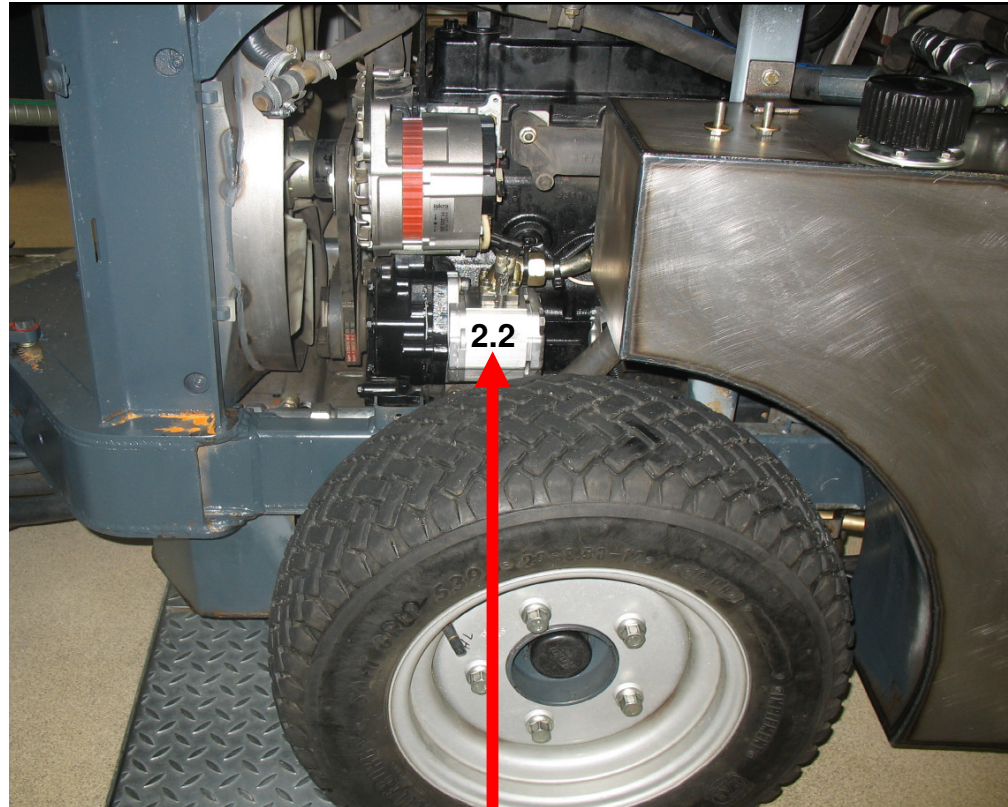
The gear pump **2.2** supplies oil for the  
hydraulic manifold **2.11** with the  
priority valve for the steering

and solenoid valves Y12, Y14, Y15,  
Y16 as well as hydraulic manifold **2.7**  
with solenoid valves Y17 and Y18



## 4.0.1 Steering

### Gear pump 2.2 (steering) in rear carriage of the CM 600



**Gear pump 2.2** (11.0 ccm), flow rate 10 to 25 l hydraulic oil/minute.  
The gear pump **2.2** supplies oil to hydraulic manifold **2.11** with the priority valve for the steering and solenoid valves Y12, Y14, Y15, Y16 as well as hydraulic manifold **2.7** with solenoid valves Y17 and Y18

# 4.0.1 Steering

## Steering unit

SEE ALSO CATALOGUE FOR HYDROSTATIC STEERING COMPONENTS

**5x6,5 DIN 6888 (Key not incl.)**

**ISO symbol**

**Sauer-Danfoss symbol**

Check valve in P	INCLUDED
Shock valves	175-195 bar
Pressure relief valve	120-125 bar
P,T,L and R	9/16-18 UNF ORFS ISO 8434-3
BLACK PAINTED	

Scale 0 10 20 30 40 50 60 70 80 90 100mm

**SAUER DANFOSS**

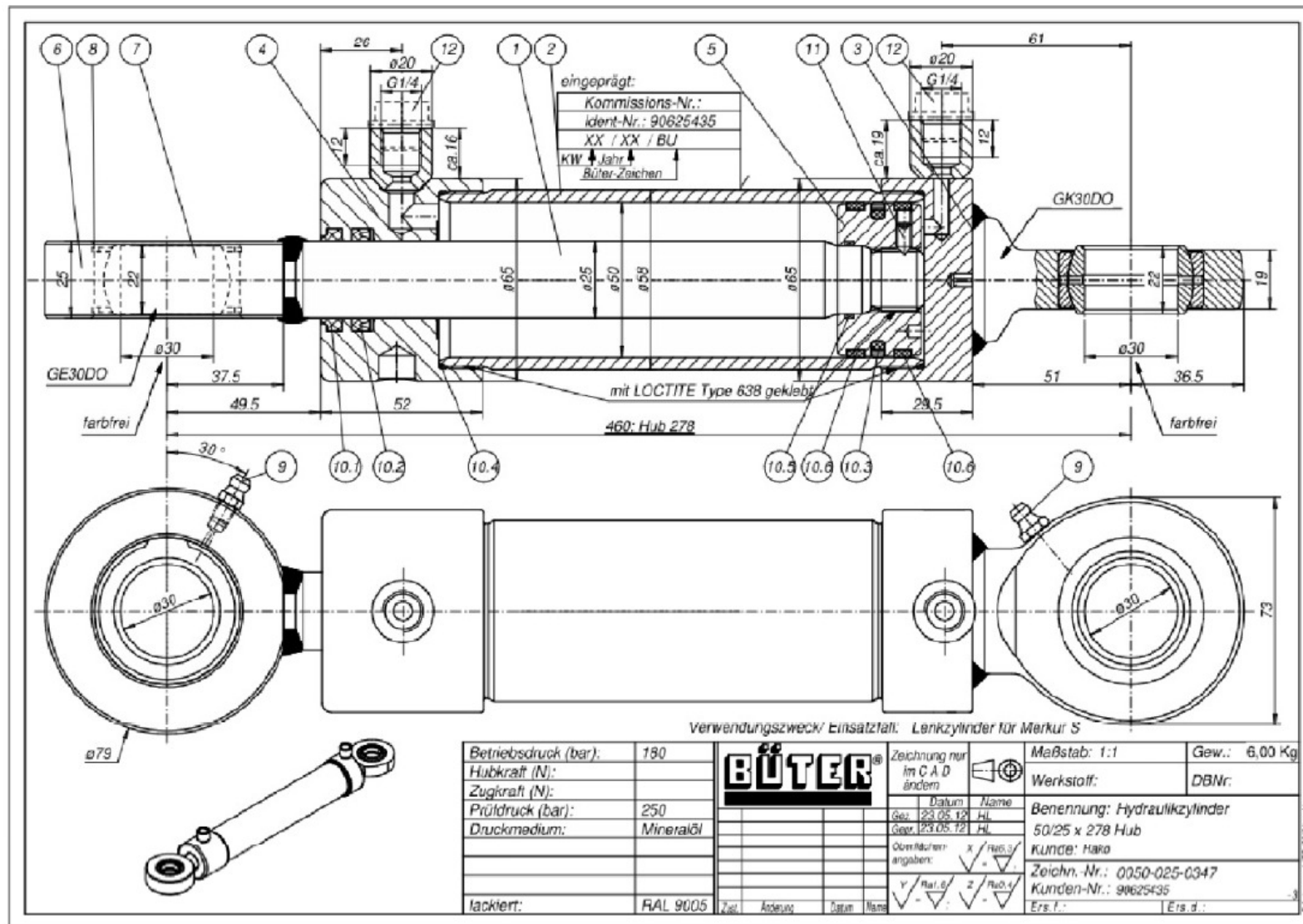
1:1  
Date 28.06.2005  
Design BP / Approval BP

Mini steering unit  
Type OSPM 80 ON

No. 150L0182

### 4.0.1 Steering

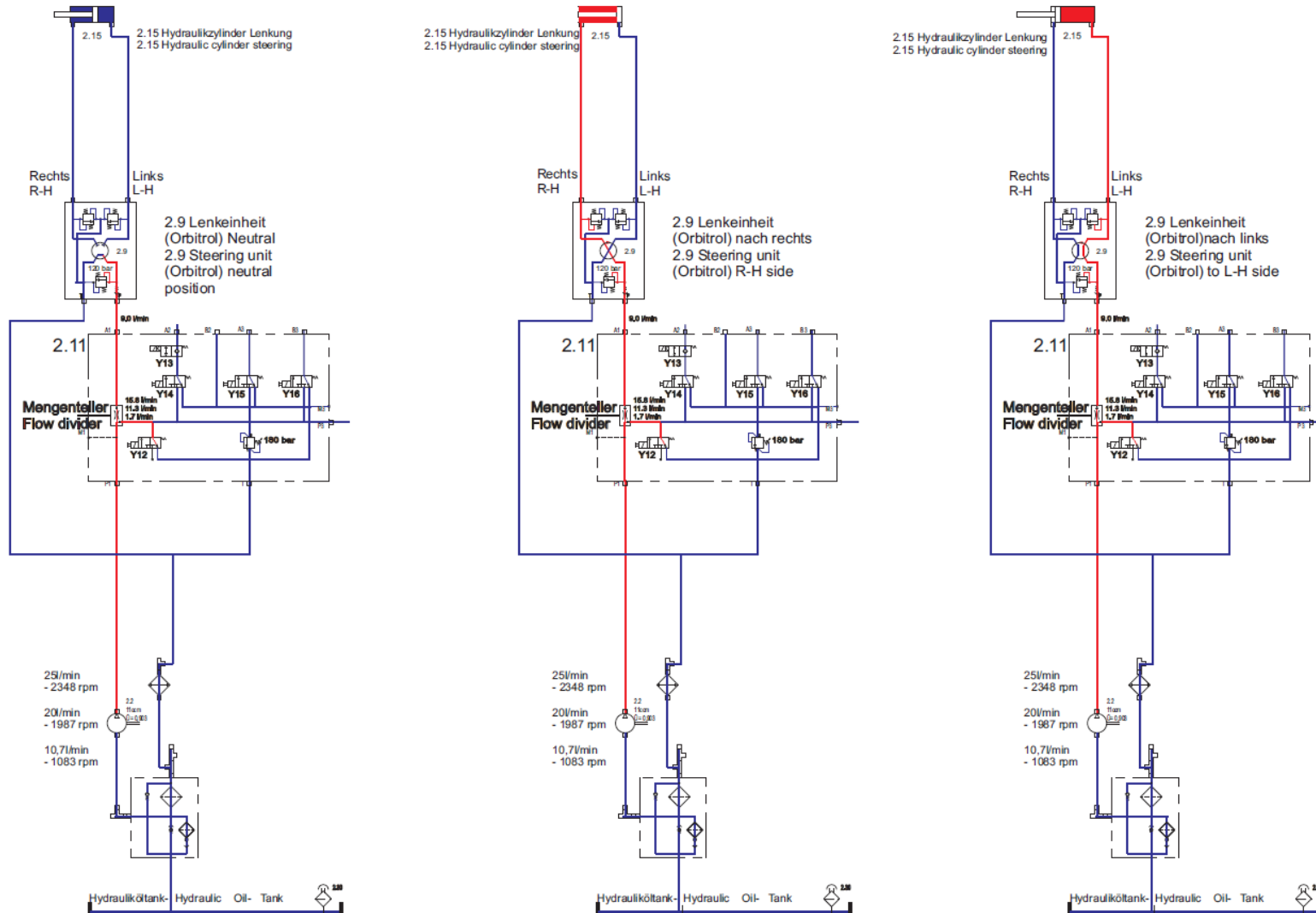
### Steering cylinder



### 4.0.1 Steering

#### Hydraulic function circuit diagram, steering

Lenkung Hako- Citymaster 600- Steering Hako- Citymaster 600



## 4.0.1 Steering

### Function faults, steering - Fault location, steering

#### I. Steering is difficult or jolts when the hydraulic oil is warm:

##### **Solution: Check the steering cylinder for internal leaks.**

To do this, turn the steering wheel to its full lock position and disassemble the hydraulic hose of the return line. Keep the steering cylinder in its full lock position with the aid of the steering wheel. No oil may escape from the screw connection of the hydraulic cylinder. If oil does escape, the seal in the hydraulic cylinder is defective.

If no oil escapes, repeat the check turning the steering wheel to the other lock direction.

**Attention: Reassemble the hydraulic hose beforehand, otherwise oil will escape.**

If oil does not escape in the other steering lock direction either, measure the hydraulic oil pressure using a manometer:

**Note: The pressure measurement must be taken when the oil is warm (50 - 55 °C). Never take measurements when the hydraulic oil is cold!**

The hydraulic oil pressure should be approx. 120 bar when the steering is at a full lock. If the measured value is under 100 bar or changes continually, disassemble the flow divider in the main control block and check for signs of soiling and damage. Clean the flow divider or replace it in the case of damage.

#### II. The steering makes noises:

**Solution: Complete the checks described for the "Steering is difficult or jolts when the hydraulic oil is warm" fault (see Section 1).**

**III. When all the checks have been completed (check the steering cylinder for internal leaks + flow divider) and there is no improvement, change the steering unit.**

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### Notes





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### Notes

