Oil handling kit
Maintenance, repair and oil refilling
1HDS680617P0001

The oil handling kit for operating mechanism enables a simple and clean on site work for the handling of hydraulic fluids.

Scope of delivery

01 Oil handling kit

- 1 x Oil collecting canister (1)
- 1 x Spray bottle 500 ml (2)
- 1 x Connecting pipe (clear) between filter and spray bottle (for self-preparation, see next page) (2a)
- 4 x Oil collecting carpet (3)
- 2 x Filters (effective against particles > 50 µ, not effective against contamination like water, or any other liquid) (4)
- 1 x Coupling piece with drain valve (5)
- 1 x Oil draining pipe (with SW10 screwing and drain valve) for operating mechanism YoM till 2014 (6)
- 1 x Oil draining pipe (minimess DN4 type) from YoM 2014 (7)

02 Scope of delivery

- 1 x Filling pipe (black) via minimess DN4 (8)
- 2 x Plastic bag with pressure lock
- 2 x Plastic bag
- 1 x Case

For operating mechanism with hydraulic power transmission
- Type AHMA (-1/-4/-8)
- Type HMB (-1/-2/-4/-8 -16/-S-Typen)
- Type HMC (-2/-4)
- For HKA use as well, but with a larger oil collecting canister (min. 30 litre)
Handling
The oil handling kit for operating mechanism enables a simple and clean on site work for the handling of hydraulic fluids. The tool set can be used in the following cases:
• Maintenance
• Repair / troubleshooting
• Oil refilling

Preparation of spray bottle
To prepare the spray bottle (2) with Filter (4) please proceed as follows:
• Cut clear pipe (2) in two pieces by 6 cm (3") each, use a cutter knife
• Push the standpipe of the spray bottle completely into the bottle and cut it off about 40 mm (2") above the bottle screw plug. Use a cutter knife
• Install the filter in between, take care about filter flow direction (see arrow)
• Use the two 6 cm clear pipe (4) to install the filter (2a) in the stand pipe

Operation manual
• Oil collecting canister (1): For clean collection of the hydraulic oil when draining the oil from the operating mechanism
• Spray bottle (500 ml) (2): To fill the mechanism with the collected and drained oil, in conjunction with the filter
• Oil-collecting mats (3): For avoiding of oil contamination of the surrounding area during the oil-handling
• Filter (4): For filtering or cleaning of the oil prior to refilling, in use of the spray bottle or via the pipe (6)
• Coupling piece with drain valve (5): To connect the drain pipes. With add. Drain valve for minimess DN connection or drive mechanism types without autarkic drain valve
• Pipes for oil draining (6, 7): For connecting the oil drain valve or Minimess DN connector, to drain the oil from low pressure reservoir of the mechanism

Not
• Always after removing refill or drain pipes from the mechanism, the closures caps have to be re-mounted immediately!
• The torque values of these closure caps are always 25 Nm

Connecting the oil handling kit
1. Remove oil collection canister (1) from the case
2. Place on solid ground
3. Place oil collection carpet (3) on the upper disk spring under the drain valve. New image!
4. Open and remove closure plug from the drain valve image shows version up to 2014: with drain valve
5. Connect drain pipe to (6) drain valve Version from 2015: with Minimess DN4 connection
6. Connect the drain pipe (7) and the coupling piece (5) with drain valve and hose for oil drain with (6) Minimess DN4. The check valve of Minimess port is automatically opened when connecting the hose (7)

Caution: The drain valve of the coupling piece (5) must be closed before connecting (lever in 90° position to the valve body).
Oil draining
1. Place and secure the open end of the pipe (6) into oil-collecting canister (1)
2. Open the drain valve of the mechanism or use the drain valve on the coupling piece (5)
3. Drain the oil. For better oil flow open the filling port (SW 10, or 3/8") closure plug
4. Close the collection canister (1), store secured in a sufficient location (dry, cool, clean)

Oil re-filling
1. Fill oil in already prepared spray bottle (2)
2. Open filling port on the mechanism (closure plug SW10 or 3/8" screw plug) for re-fill (see GPFX 851 030)
3. Insert the end of the spray bottle into the re-filling port of the mechanism
4. By pressing the spray bottle, the oil gets filtered and filled into the mechanism
### Oil level overview different mechanism types

<table>
<thead>
<tr>
<th>Type of operating mechanism</th>
<th>Mounting position in operation</th>
<th>Filling in operating condition without pressure according to figures. For vertical drives, top up with indicated additional quantity.</th>
<th>Filling area when the operating mechanism is under full pressure (in operation). In case of filling of a new drive or topping-up after commissioning.</th>
<th>Minimum oil level in operation Operating mechanism under full pressure. Topping-up acc. to column 2</th>
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</thead>
<tbody>
<tr>
<td><strong>AHMA-1</strong></td>
<td>Vertical</td>
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<td><strong>AHMA-4</strong></td>
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<td><strong>AHMA-8</strong></td>
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### Actuation Type

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<tr>
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<tr>
<td>Mounting position</td>
<td>Vertical</td>
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**Level in mounting position, operating mechanism under tension.**

- **Vertical**: max. 10 mm, min. 5 mm
- **Horizontal**: max. 15 mm, max. 10 mm