

### 3. Maintenance of Planetary-Gearboxes Typ P(H) / PF(H) / MP(H) / MPF(H)

#### 3.1 Changing the lubricant

This gearbox is filled with a synthetic lubricant.

# N.B.! Do not mix mineral and/or synthetic grease/oil grades. The gearbox could be damaged if this is done.

#### 3.2 Oil change interval

The first oil change must be carried out after approx. 1.000 operating hours. Further oil changes are necessary after every 10.000 operating hours. Max. 3 years. It is necessary to change the oil, please work with point 3.3.

#### 3.3 Procedure

- # Allow gearbox to warm up
- # Secure drive and machine from unintentional movement or switching on
- # Open drain plug. allow lubricant to drain out through drain hole
- # Close drain plug
- # Remove vent and fill with recommended oil grade to the oil level mark or the centre of the inspection glass
- # Replace vent.

The table below specifies the required oil quantity.

Oil type according to parts list or equivalent oil from other manufacturers, miscibility must be checked.

#### 3.4 Required oil quantities

Gearbox size	04	8	16	32	64	128	256
Ratio	3,4 - 9	3,4 - 9	3,4 - 9	3,4 - 9	3,4 - 9	3,4 - 9	3,4 - 9
Oil qty. [Liter]	0,3	0,5	1,2	2,2	3,5	5,1	12

Gearbox size	04	8	16	32	64	128	256
Ratio	13,6 - 35	13,6 - 35	13,6 - 35	13,6 - 35	13,6 - 35	13,6 - 35	13,6 - 35
Oil qty. [Liter]	0,35	0,55	1,8	2,6	4,2	5	12

Gearbox size	04	8	16	32	64	128	256
Ratio	46,24-245	46,24-245	46,24-245	46,24-245	46,24-245	46,24-245	46,24-245
Oil qty. [Liter]	0,4	0,6	2	3	4,6	7	14

N.B.! The volumes stated are approximate values.

The inspection glass or oil dipstick is definitive for the precise oil volume.