# **Technical Information**

**Rolling Bearings** 

January 2000 TI No. WL 80-46 E

### **FAG Hand Pump Sets**

The programme of FAG hand pump sets comprises the following basic designs: - PUMPE1000.0, 7L (one-step pump)

- PUMPE1000.4L (two-step pump)
- PUMPE1600.4L (two-step pump)
- PUMPE2500.4L (two-step pump)

The two-step pumps have a large delivery volume in the low-pressure range and then automatically switch to the high-pressure stage. In this way a high working speed is achieved. For applications where larger amounts of oil are required the two-step pumps are also available with an 8-litre oil . container (suffix .8L).

For applications where a separate oil supply is required by the way the adapter sleeves or withdrawal sleeves are mounted we will supply on request a two-way valve (suffix .V).



### FAG Hand Pump Set 1000 bar (one-step pump)

Pressure generator for the hydraulic method and for hydraulic nuts

# FAG hand pump set 1000 bar (0.7-liter oil container)

This hand pump set is suitable for hydraulically mounting and dismounting rolling bearings, for mounting pressfitted assemblies with contact pressures of up to  $50 \text{ N/mm}^2$  and for driving hydraulic nuts up to RKP395 and RKP300.526205A, respectively.

The oil container has a volume of 0.7 l. The pump is connected by means of a high-pressure tube (1000 bar, 1.5 m long) and a plug-in joint (1000 bar) for connecting thread hole G 1/4 (see drawing).

Sleeve connecting pieces have to be used for mounting and dismounting rolling bearings with adapter and withdrawal sleeves. If other connections are provided, adapters and reduction adapters can be used.

The pump set is delivered ready for use in a metal box.

#### Scope of delivery:

- 1 hand pump set (1000 bar) with an 0.7-litre oil container with an oil filling of Shell Voltol sliding oil 46 (viscosity 46 mm $^2$ /s at 40 °C), pressure-gauge connection in the pump head
- 1 pressure gauge (0-1000 bar, dia 63 mm)
- 1 HP tube (1000 bar, 1.5 m long)
- 1 plug-in joint (1000 bar, connecting thread G 1/4)
- 1 metal box (650 x 260 x 200 mm) Weight (incl. oil filling and metal box) 10 kg

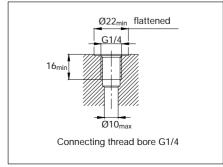
### Order designation: **PUMPE1000.0,7L**

Order designation for repair kit for the one-step, 1000-bar pump: KIT.PUMPE1000.0,7L



#### Oil volume per stroke cm<sup>3</sup>

2.2



### FAG Hand Pump Sets 1000 bar (two-step pump)

Pressure generators for the hydraulic method and for hydraulic nuts

### FAG hand pump sets 1000 bar (4-l oil container)

These hand pump sets are suitable for hydraulically mounting and dismounting rolling bearings, for hydraulic nuts and for mounting press-fitted assemblies with up to 50 N/mm<sup>2</sup>, e.g. ship's propellers.

The oil containers have a volume of 4 l (8-litre containers also available on request).

The pumps are connected by means of a high-pressure tube (1000 bar, 2 m long) and a plug-in joint (1000 bar) for connecting thread bore G 1/4 (see drawing on page 2).

If two connections have to be supplied with oil simultaneously the pump set is additionally fitted with a two-way valve. Oil supply is then effected through two high-pressure tubes and two plug-in joints.

The pump sets are delivered ready for use in a metal box.

#### Hand pump set PUMPE1000.4L (for 1 connection)

#### Scope of delivery:

- 1 hand pump (1000 bar) with a 4-litre oil container with an oil filling of Shell Voltol 46 sliding oil (viscosity 46 mm<sup>2</sup>/s at 40 °C)
- 1 attached pressure-gauge connecting
- 1 pressure gauge (0-1000 bar, dia 63 mm)
- 1 HP tube (1000 bar, 2 m long)
- plug-in joint (1000 bar)
- 1 metal box 900 x 250 x 250 mm Weight (incl. oil filling and metal box) 24 kg

#### Order designation: PUMPE1000.4L

#### Hand pump set PUMPE1000.4L.V (for 2 connections)

#### Scope of delivery:

- 1 hand pump (1000 bar) with a 4-litre oil container with an oil filling of Shell Voltol 46 sliding oil (viscosity 46 mm<sup>2</sup>/s at 40 °C)
- 1 attached two-way valve (with pressuregauge connection)
- pressure gauge (0-1000 bar, dia 63 mm)
- 2 HP tubes (1000 bar, 2 m long)
- 2 plug-in joints (1000 bar)
- 1 metal box 900 x 250 x 250 mm Weight (incl. oil filling and metal box)

#### Order designation: PUMPE1000.4L.V

Order designation for repair kit for the two-step, 1000-bar pumps: KIT.PÚMPE1000.4L



#### Oil volume per stroke up to 30 bar 30 to 1000 bar $cm^3$

32	1.6	
U⊷	1.0	

### FAG Hand Pump Sets 1600 bar

Pressure generators for the hydraulic method

### FAG hand pump sets 1600 bar

These hand pump sets are suitable for hydraulically mounting and dismounting rolling bearings and for mounting pressfitted assemblies with contact pressures of up to 80 N/mm², e.g. ship's rudder shafts and rudder blades.

The oil containers have a volume of 4 l (8-litre containers also available on request).

The pump is connected by means of an HP tube (1600 bar, 2 m long) and a plug-in joint (1600 bar, for connecting thread holes G 1/4, see drawing on page 2)

If two connections have to be supplied with oil simultaneously, the pump set is additionally fitted with a two-way valve. Oil supply is then effected through two high-pressure tubes and two plug-in joints.

The pump sets are delivered ready for use in a metal box.

### **Hand pump set PUMPE1600.4L** (for 1 connection)

Scope of delivery:

- 1 hand pump (1600 bar) with a 4-litre oil container with an oil filling of Shell Voltol sliding oil 46 (viscosity 46 mm²/s at 40 °C)
- 1 attached pressure-gauge connecting piece
- 1 pressure gauge (0-1600 bar, dia 100 mm)
- 1 HP tube (1600 bar, 2 m long)
- 1 plug-in joint (1600 bar)
- 1 metal box 900 x 250 x 250 mm Weight (incl. oil filling and metal box) 25 kg

### Order designation: **PUMPE1600.4L**

### **Hand pump set PUMPE1600.4L.V** (for 2 connections)

Scope of delivery:

- 1 hand pump (1600 bar) with a 4-litre oil container with an oil filling of Shell Voltol sliding oil (viscosity 46 mm $^2$ /s at 40 °C)
- 1 attached two-way valve (with pressuregauge connection)
- 1 pressure gauge (0-1600 bar, dia 100 mm)
- 2 HP tubes (1600 bar, 2 m long)
- 2 plug-in joints (1600 bar)
- 1 metal box 900 x 250 x 250 mm Weight (incl. oil filling and metal box) 28 kg

### Order designation: **PUMPE1600.4L.V**

Order designation for repair kit for the two-step, 1600-bar pumps: KIT.PUMPE1600.4L

#### Oil volume per stroke up to 30 bar 30 to 1600 bar cm<sup>3</sup>

32 1.6



### FAG Hand Pump Sets 2500 bar

Pressure generators for the hydraulic method

### FAG hand pump sets 2500 bar

These hand pump sets are suitable for hydraulically mounting and dismounting rolling bearings and for mounting pressfitted assemblies with high contact pressures of up to 125 N/mm², e.g. gearwheels and couplings.

The oil containers have a volume of 4 l (8-litre containers also available on request).

The pump is connected by means of an HP tube (2500 bar, 2 m long) and an adapter or reduction adapter (dimensions and connecting hole, see drawing and table).

If two connections have to be supplied with oil simultaneously, the pump set is additionally fitted with a two-way valve. Oil supply is then effected through two high-pressure tubes.

The pump sets are delivered ready for use in a metal box.

## **Hand pump set PUMPE2500.4L** (for 1 connection)

#### Scope of delivery:

- 1 hand pump (2500 bar) with a 4-litre oil container with an oil filling of Shell Voltol sliding oil 46 (viscosity 46 mm²/s at 40 °C)
- 1 attached pressure-gauge connecting piece
- 1 pressure gauge (0-2500 bar, dia 100 mm)
- 1 HP tube (2500 bar, 2 m long)
- 1 closing nipple G 1/4
- 1 adapter G 1/4, and 3 reduction adapters (G 3/8, G 1/2, G 3/4) 1 metal box 940 x 280 x 280 mm Weight (incl. oil filling and metal box) 27 kg

# Order designation: **PUMPE2500.4L**

### **Hand pump set PUMPE2500.4L.V** (for 2 connections)

#### Scope of delivery:

- hand pump (2500 bar) with a 4-litre oil container with an oil filling of Shell Voltol sliding oil 46 (viscosity 46 mm²/s at 40 °C)
- 1 attached two-way valve (with pressure-gauge connection)
- pressure gauge (0-2500 bar, dia 100 mm)
- 2 HP tubes (2500 bar, 2 m long)
- 2 closing nipples G 1/4
- each 2 adapters G 1/4 and reduction adapters G 3/8, G 1/2, G 3/4
- 1 metal box 940 x 280 x 280 mm Weight (incl. oil filling and metal box) 30 kg

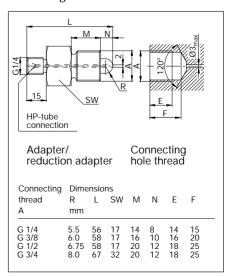
# Order designation: **PUMPE2500.4L.V**

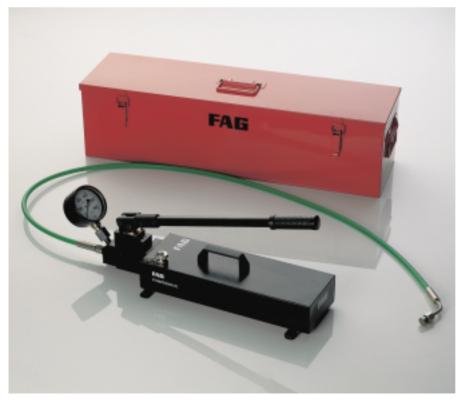
Order designation for repair kit for the two-step, 2500-bar pumps: **KIT.PUMPE2500.4L** 

#### Oil volume per stroke up to 20 bar 20 to 2500 bar cm<sup>3</sup>

32 0.9

# Reduction adapters and adapters and connecting hole





# FAG Hand Pump Sets Order designations



### FAG hand pump sets (order designations)

Pump	<b>Hand pump sets</b> Basic design	with 8-litre container	with distributor	with 8-litre container and distributor
one-step 1000 bar	PUMPE1000.0,7L			
two-step 1000 bar 1600 bar 2500 bar	PUMPE1000.4L PUMPE1600.4L PUMPE2500.4L	PUMPE1000.8L PUMPE1600.8L PUMPE2500.8L	PUMPE1000.4L.V PUMPE1600.4L.V PUMPE2500.4L.V	PUMPE1000.8L.V PUMPE1600.8L.V PUMPE2500.8L.V
Repair kits  KIT.PUMPE1000 KIT.PUMPE1000 KIT.PUMPE1600 KIT.PUMPE2500	0.4L 0.4L	0.2 kg 0.4 kg 0.4 kg 0.6 kg		

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