

# Grease Pump Units

1-0107-4-US

for progressive and multiline systems,  
manually, pneumatically or hydraulically actuated



PF-23-2



PFP-23-2



PFH-23-2

Single- and dual-circuit piston pumps are designed for the operation of central lubrication systems with progressive feeders on small and medium-size machines and equipment.

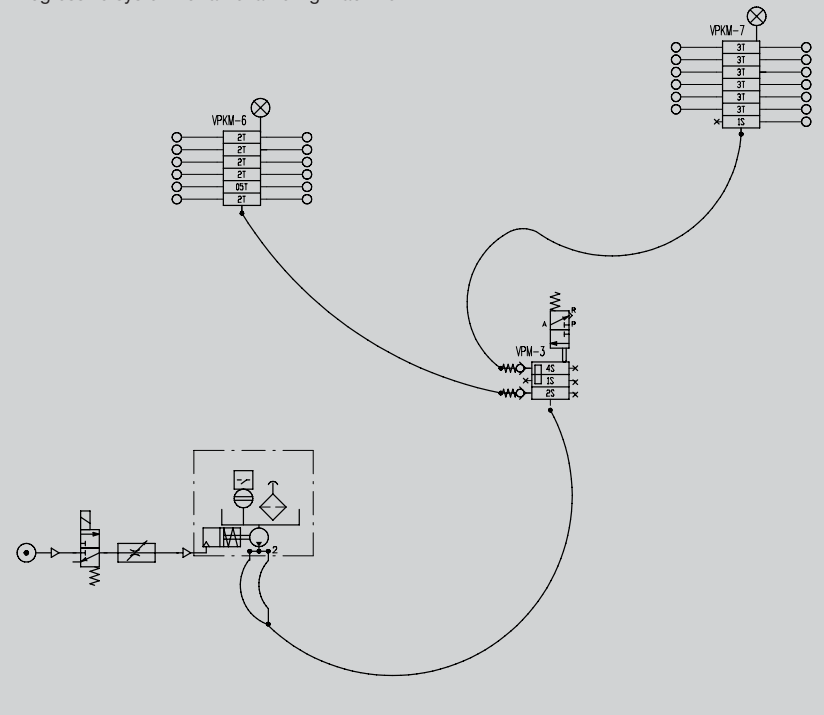
The follower piston employed under atmospheric pressure in the lubricant reservoirs makes it possible to use grease up to NLGI grade 2 at temperatures ranging from +10 °C to +60 °C.

**Please note!** At temperatures below +10°C it is necessary to use pumps equipped with follower pistons pressurized by compressed air, PFP-23-2-S1 and PFP-23-22-S1 on page 4.

## Practical example

Due to the degree of explosion-proofing it must be remembered that no current-conducting components may be used in the area of the installation. Signaling equipment like float switches in the pumps and cycle switches on master progressive feeders are pneumatic actuators. The air signal emitted is converted to an electrical signal outside the explosion-hazard area.

Progressive system for an enameling machine



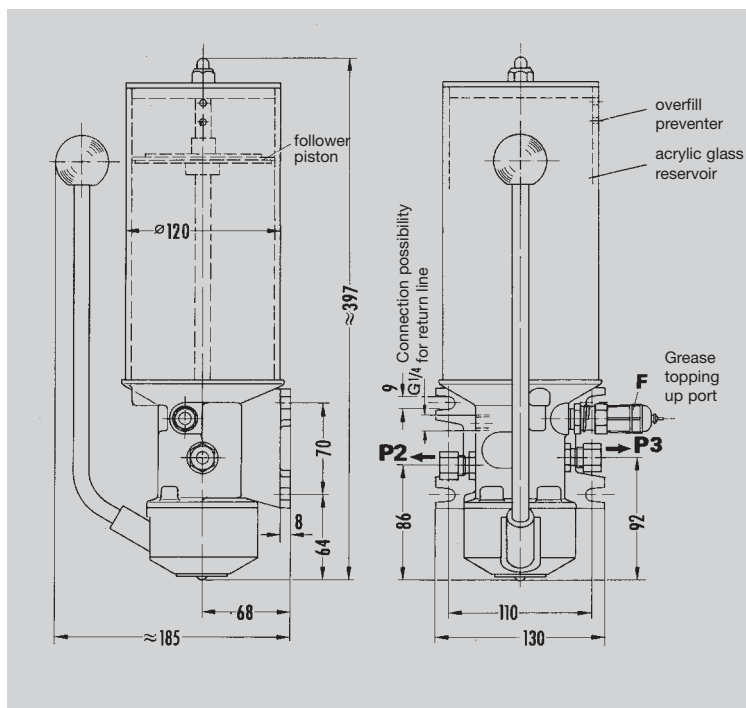
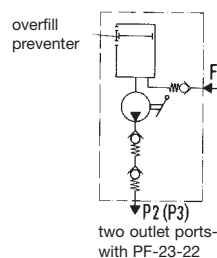
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**VOGEL®**  
Central  
Lubrication

**PF-23-2, PF-23-22 with follower pistons at atmospheric pressure****manually actuated**

Order No.	Number of outlet ports	Delivery rate (ccm) per port/stroke	
		P2	P3
PF-23-2	1		2.5 *
PF-23-22	2	1.25 **	1.25 **

Reservoir capacity ..... 1.5 kg  
 Reservoir material ..... acrylic glass  
 Operating pressure with  
 manual force  $\approx 20$  kg ..... max. 100 bars  
 Lubricant ..... grease up to NLGI grade 2  
 Temperature range ..... +10 to +60 °C  
 Mounting position ..... vertical



\* optional with P2 or P3  
 (one outlet port closed by plug)

\*\* both outlet ports have to be used.

Use connection fittings with cutting-sleeve screw unions to DIN 2353.

**P2, P3** = main lines to system ( $\varnothing 10$  tubing)

Grease topped up via connection port **F**

Order No. for coupling socket: **995-001-500**

Order No. for grease topping-up pump: **169-000-004**

**Notice!**

All products from VOGEL may be used only for their intended purpose. If operating instructions are supplied together with the products, the provisions and information therein of specific relevance to the equipment must be observed as well.

In particular, we call your attention to the fact that hazardous materials of any kind, especially the materials classified as hazardous by EC Directive 67/548/EEC, Article 2, Par. 2, may only be filled into VOGEL central lubrication systems and components and delivered and/or distributed with the same after consultation with and written approval from VOGEL.

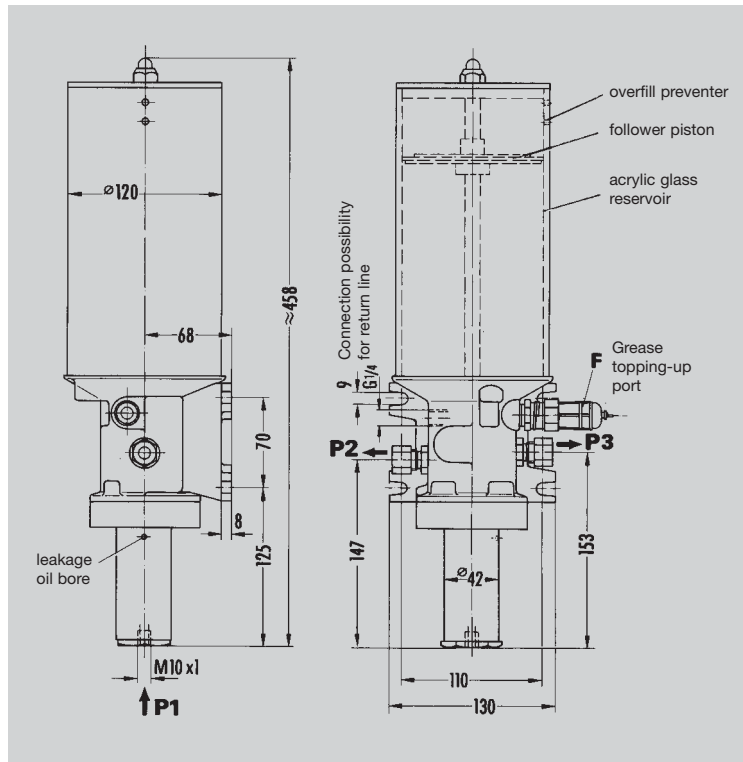
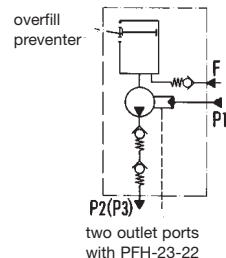
All products manufactured by VOGEL are not approved for use in conjunction with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1013 mbars) by more than 0.5 bar at their maximum permissible temperature.

**PFH-23-.., PFP-23-.. with follower pistons at atmospheric pressure****hydraulically actuated**

Order No.	Number of outlet ports	Delivery rate (ccm) per port/stroke	
		P2	P3
PFH-23-2	1		2.5 *
PFH-23-22	2	1.25 **	1.25 **

Reservoir capacity ..... 1.5 kg  
 Reservoir material ..... acrylic glass  
 Operating pressure as a function of P1 ..max. 200 bars  
 Operating pressure P1 ..... 6 to 30 bars  
 Actuating piston with resetting spring

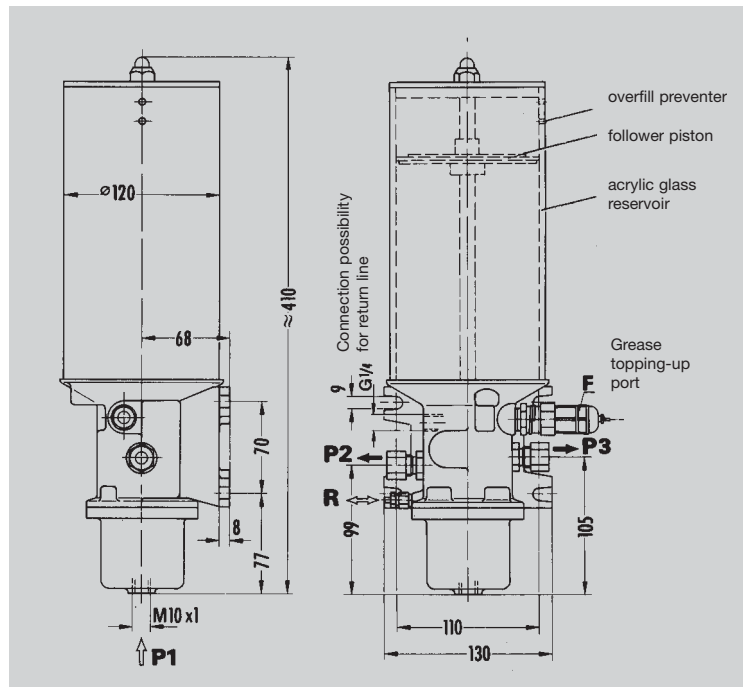
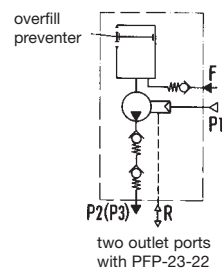
Area ratio: force/lubrication ..... 7:1  
 Lubricant ..... grease up to NLGI grade 2  
 Temperature range ..... +10 °C to +60 °C  
 Mounting position ..... vertical

**pneumatically actuated**

Order No.	Number of outlet ports	Delivery rate (ccm) per port/stroke	
		P2	P3
PFP-23-2	1		2.5 *
PFP-23-22	2	1.25 **	1.25 **

Reservoir capacity ..... 1.5 kg  
 Reservoir material ..... acrylic glass  
 Operating pressure as a function of the air pressure ..... max. 190 bars  
 Actuating pressure for pump ..... 6 to 10 bars  
 Actuating piston with resetting spring

Area ratio: force/lubrication ..... 20:1  
 Lubricant ..... grease up to NLGI grade 2  
 Temperature range ..... +10 °C to +60 °C  
 Mounting position ..... vertical



\* optional with P2 or P3  
 (one outlet port closed by plug)

\*\* both outlet ports have to be used.

Use connection fittings with cutting-sleeve screw unions to DIN 2353.

P1 = pressurized oil or compressed-air port  
 P2, P3 = main line to system (ø 10 tube)  
 R = air compensation line

Grease topped up via port F

Order No. for coupling socket: 995-001-500

Order No. for grease topping-up pump: 169-000-004

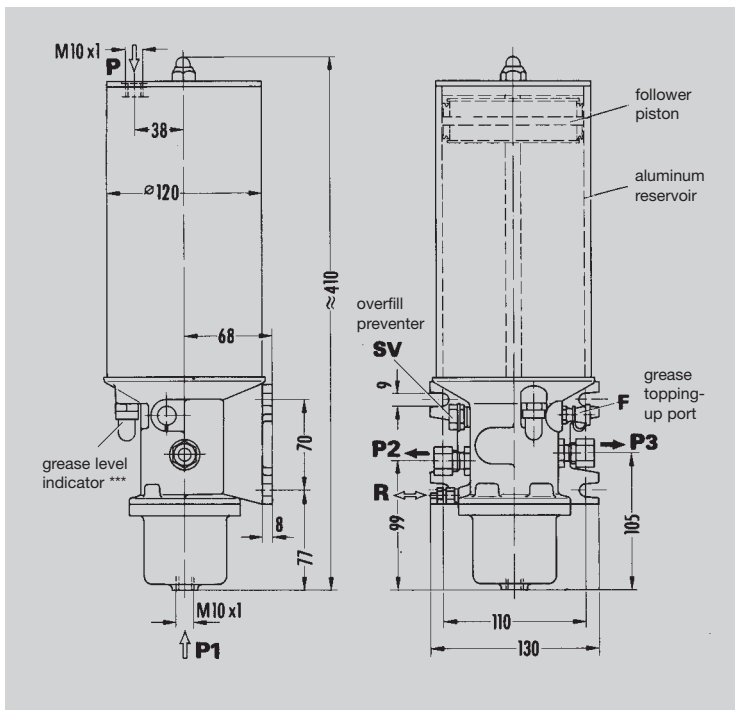
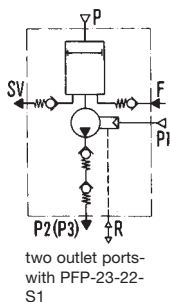
## PFP-23-2-S1, PFP-23-22-S1 with piston pumps pressurized by compressed air pneumatically actuated

These pumps have to be used at temperatures below +10 °C.

Temperature range: – 25 to + 80 °C

Order No.	Number of outlet ports	Delivery rate (ccm) per port/stroke	
		P2	P3
PFP-23-2-S1	1		2.5 *
PFP-23-22-S1	2	1.25 **	1.25 **

Reservoir capacity ..... 1.5 kg  
 Reservoir material ..... Al Mg5 F32  
 Operating pressure as a function of the air pressure ..... max. 190 bars  
 Actuating pressure for pump and follower piston ..... 6-10 bars  
 Actuating piston with resetting spring  
 Area ratio: force/lubrication ..... 20:1  
 Lubricant ..... grease up to NLGI grade 2  
 Temperature range ..... –25 °C to +80 °C  
 Mounting position ..... vertical and horizontal



- \* optional with P2 or P3 (one outlet port closed by plug)
  - \*\* both outlet ports have to be used.
  - \*\*\* pin protrudes in sight glass when grease at minimum level.
- An electric **warning switch** can be used in addition.

Use connection fittings with cutting-sleeve screw unions to DIN 2353.

- P** = line from compressed-air network to load follower piston (max. 10 bars)
- P1** = compressed-air port
- P2, P3** = main line to system (ø 10 tubing)
- R** = air compensation line
- F** = grease topping-up port
- SV** = overfill preventer

Grease topped up via conical head nipple DIN 71412-AM10x1

Topping-up pump: Customary low-pressure grease gun, pneumatically actuated, with button-head fitting for conical head nipple DIN 71412

### Warning switch

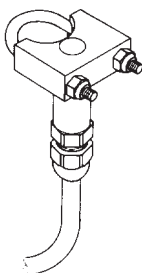
Supplementary unit for emission of an electrical signal when grease drops to minimum level.

Can be retrofitted to pumps PFP-23-2-S1 and PFP-23-22-S1

#### Sensor section

Reed contact load ..... 12 W, 18 VA  
 Switching voltage ..... max. 220 V AC/DC  
 Switching current ..... max 0.8 A AC/DC  
 2-core cable ..... length ≈ 5 m

Order No. **WS298**



#### Leaflet information

1-0107-1-US Progressive Feeders  
 1-0107-2-US Grease Pump Units (models KFA, KFG, GSJ0)  
 1-0107-3-US Grease Pump Units (models GSJ, FB, FF)  
 1-0107-5-US Piston Pumps (Typ PPU, PHU, BF)  
 1-0107-6-US Accessories for Progressive Systems  
 DSK 0-003-02 E Modular Feeder PSG 2  
 DSK 0-003-03 E Modular Feeder PSG 3



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