

# Grease Pump Units

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 centralized lubrication systems with progressive feeders on small and medium-size machines and equipment.

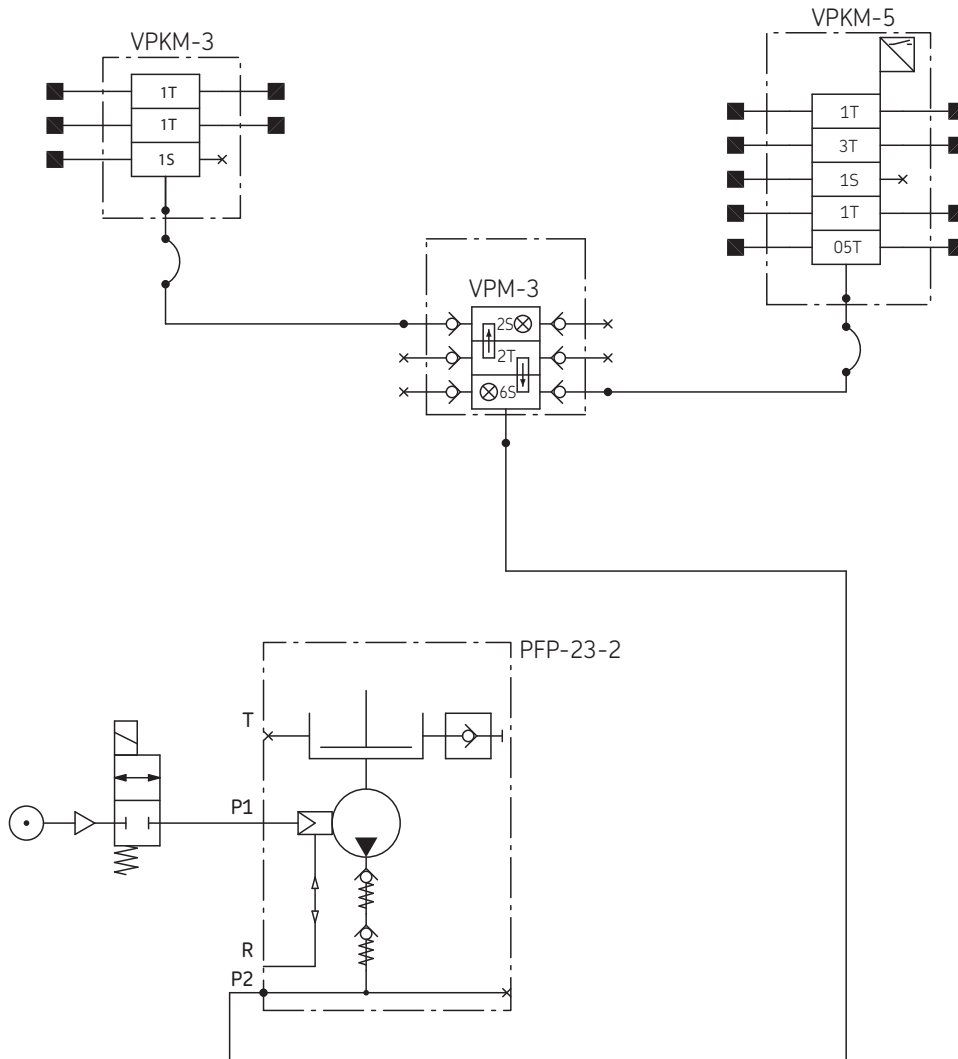
The follower piston employed under atmospheric pressure in the lubricant reservoirs makes it possible to use grease up to NLGI grade 2 at temperatures ranging from +10 °C to +60 °C.

### Please note!

At temperatures below +10 °C, it is necessary to avoid damages to use pumps equipped with follower pistons pressurized by compressed air, see PFP-23-2-S1 and PFP-23-22-S1 on page 6.

# Practical example

Progressive system with pneumatically actuated grease pump unit



# PF-23-2, PF-23-22 with follower piston at atmospheric pressure manually actuated

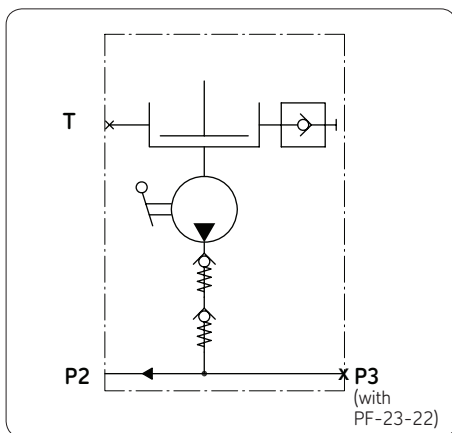
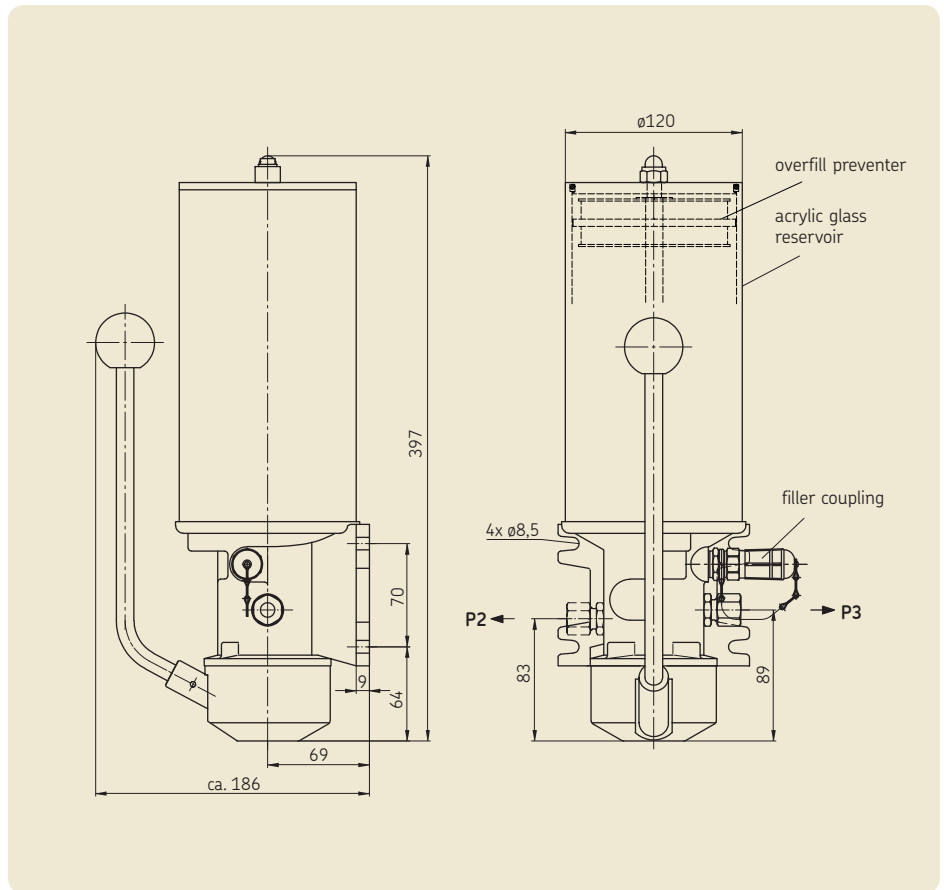
Order No.	Number of outlet ports	Delivery rate [cm <sup>3</sup> ] per port/stroke	
		P2	P3
PF-23-2	1	2.5 *	2.5 *
PF-23-22	2	1.25 **	1.25 **

\* 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.

**Technical data**

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



**P2, P3** = main lines to system (ø 10 tubing)  
**T** = return to tank

Grease topped up via filler coupling  
 Order No. for coupling socket: **995-001-500**  
 Order No. for grease topping-up pump: **169-000-004**

See important product usage information on the back cover.

# PFH-23-2, PFH-23-22 with follower piston at atmospheric pressure

hydraulically actuated

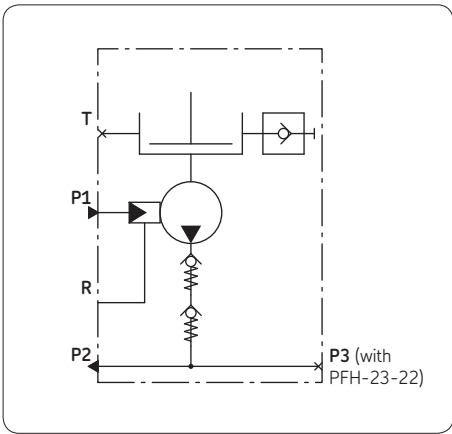
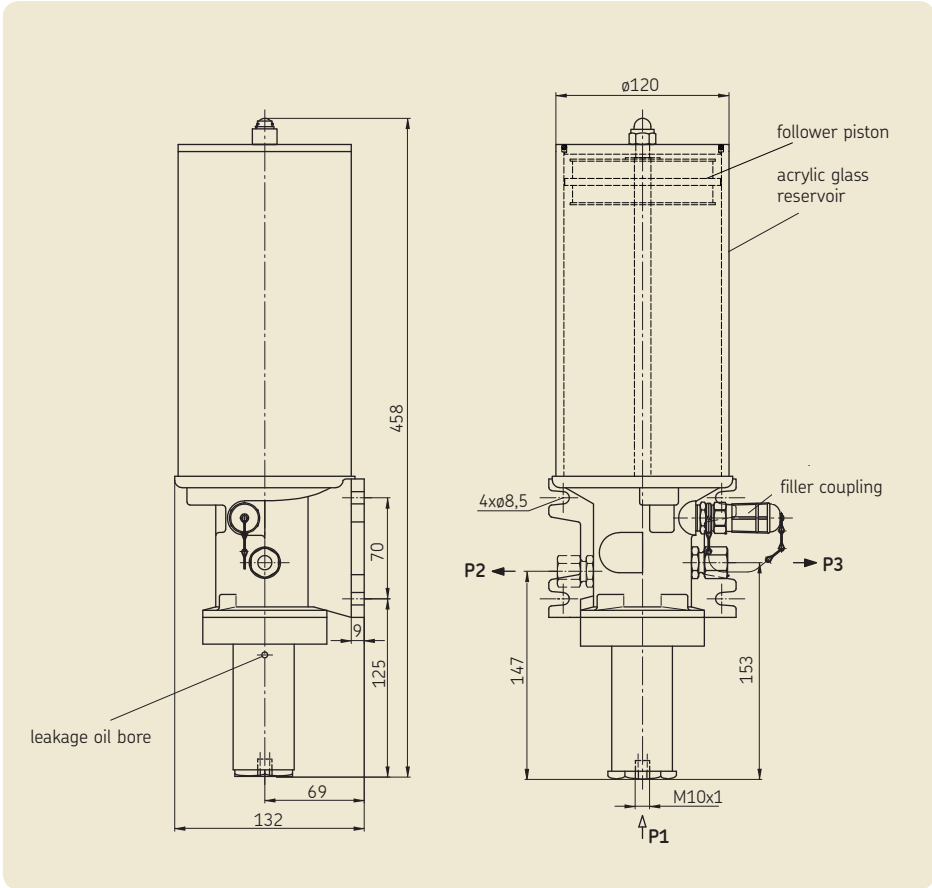
Order No.	Number of outlet ports	Delivery rate [cm <sup>3</sup> ] per port/stroke	
		P2	P3
PFH-23-2	1	2.5 *	2.5 *
PFH-23-22	2	1.25 **	1.25 **

\* 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.

**Technical data**

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 to +60 °C  
 Mounting position ..... vertical



**P1** = pressurized oil or compressed-air port  
**P2, P3** = main line to system (ø 10 tubing)  
**T** = return to tank

Grease topped up via filler coupling  
 Order No. for coupling socket: **995-001-500**  
 Order No. for grease topping-up pump: **169-000-004**

# PFP-23-2, PFP-23-22 with follower piston at atmospheric pressure pneumatically actuated

Order No.	Number of outlet ports	Delivery rate [cm <sup>3</sup> ] per port/stroke	
		P2	P3
PFP-23-2	1	2.5 *	2.5 *
PFP-23-22	2	1.25 **	1.25 **

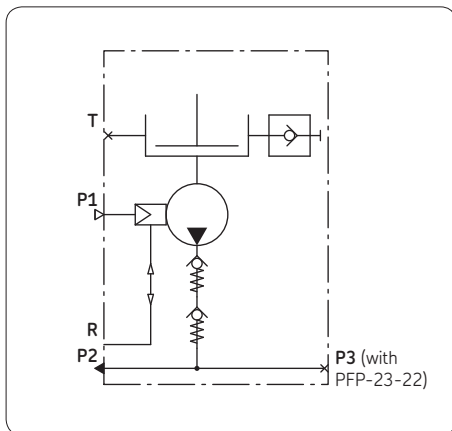
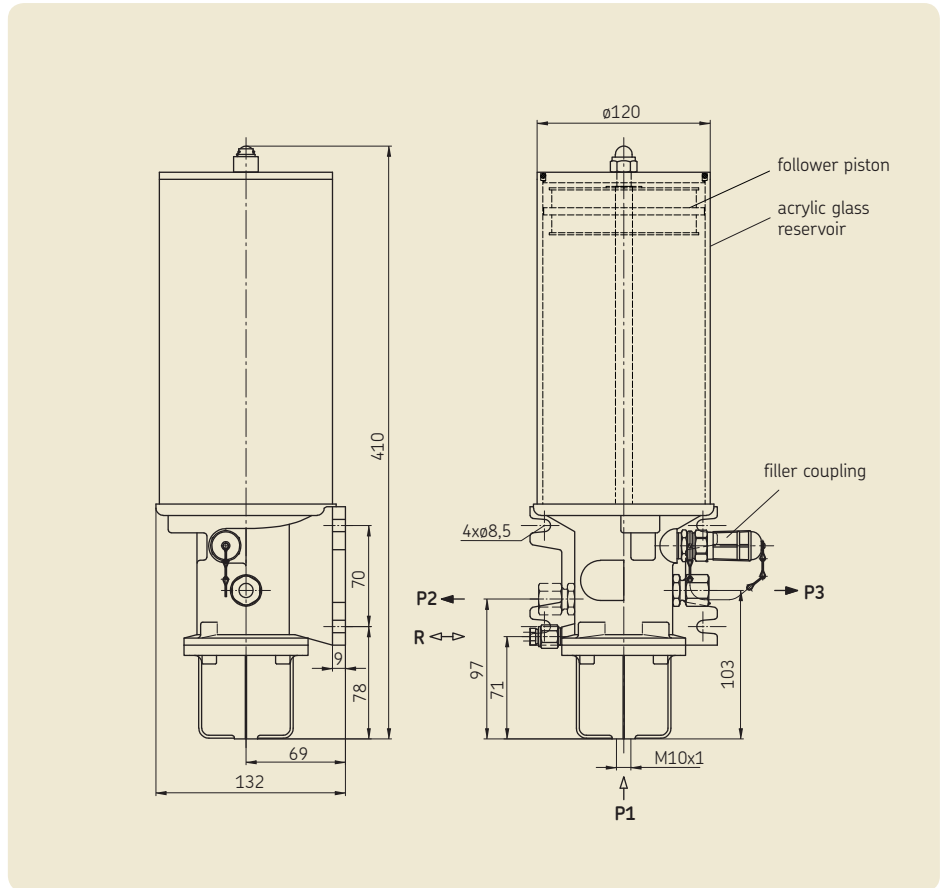
\* Optional with P2 or P3  
(one outlet port closed by plug)

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

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

**Technical data**

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 to +60 °C  
 Mounting position ..... vertical



- P1** = pressurized oil or compressed-air port
- P2, P3** = main line to system (ø 10 tubing)
- R** = air compensation line
- T** = return to tank

Grease topped up via filler coupling  
 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 pump pressurized by compressed air pneumatically actuated

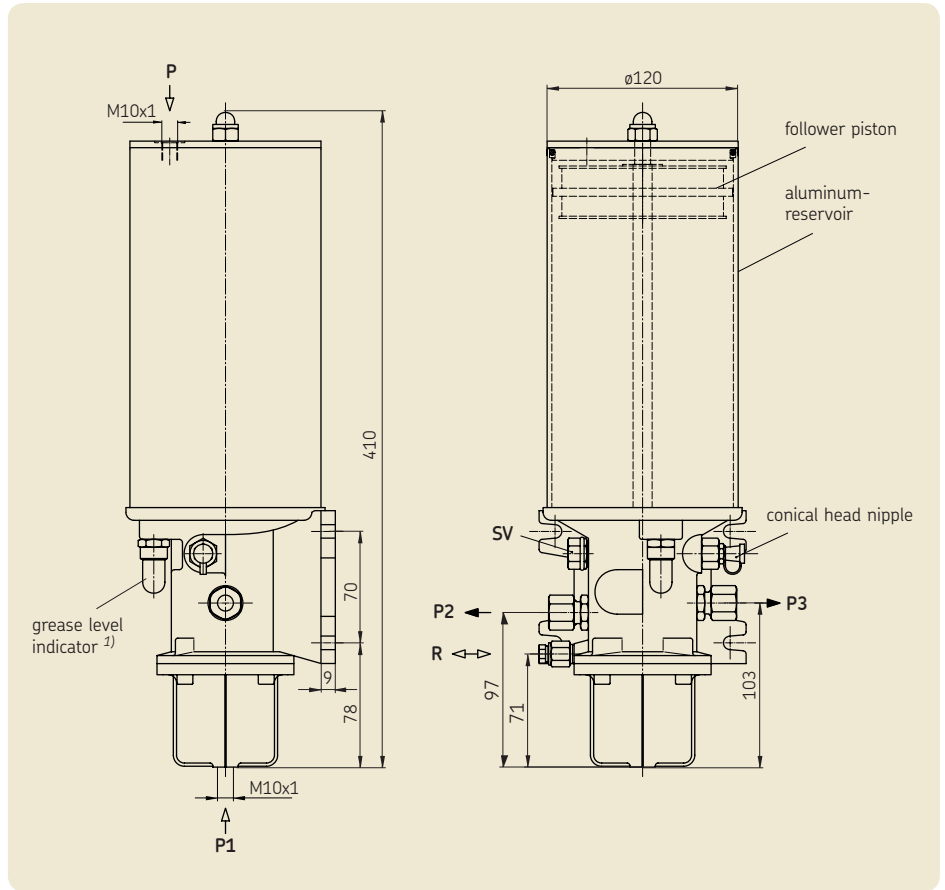
Order No.	Number of outlet ports	Delivery rate [cm <sup>3</sup> ] per port/stroke	
		P2	P3
PFP-23-2-S1	1	2.5 *	2.5 *
PFP-23-22-S1	2	1.25 **	1.25 **

\* 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.

**Technical data**

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 to 10 bars  
 Actuating piston with resetting spring  
 Area ratio: force/lubrication . . . . . 20:1  
 Lubricant . . . . . grease up to NLGI grade 2  
 Temperature range . . . . . -25 to +80 °C  
 Mounting position . . . . . vertical and horizontal

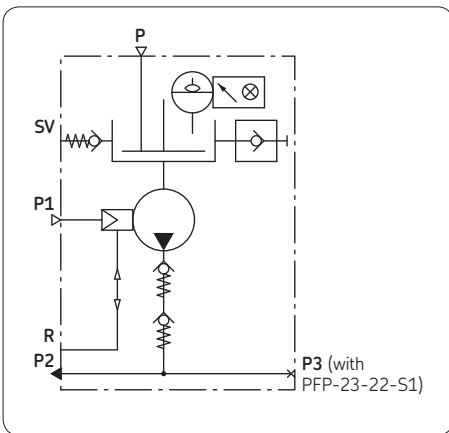


1) Pin protrudes in sight glass when grease at minimum level.  
 An electric warning switch can be used in addition.

- P** = line from compressed-air network to load follower piston (max. 10 bars)
- P1** = compressed-air port
- P2, P3** = main lines to system (ø 10 tubing)
- R** = air compensation line
- SV** = overflow valve

Grease topped up via conical head nipple DIN 71412-AM 10x1

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

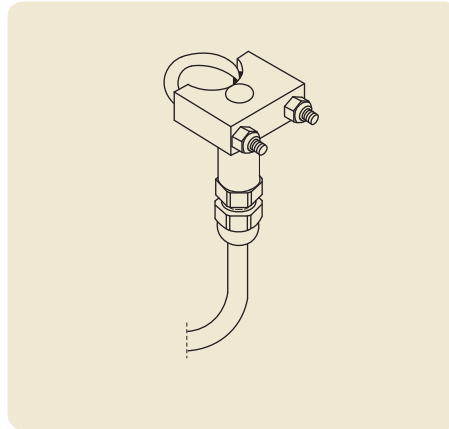


## Warning switch

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

### Technical data

Order No. ....	<b>WS298</b>
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 $\approx$ 5 m



**Order No. 1-0107-4-EN**

Subject to change without notice! (07/2014)

**Important product usage information**

All products from SKF may be used only for their intended purpose as described in this brochure and in any instructions. If operating instructions are supplied with the products, they must be read and followed.

Not all lubricants are suitable for use in centralized lubrication systems. SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF lubrication systems or their components are not approved for use 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.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

**Further brochures**

- 1-3013-EN to 1-3017-EN Progressive feeders
- 1-0107-5-EN Pison pumps (PHU, PPU)
- 1-0107-6-EN Accessories for progressive feeders
- 1-4002-1-EN Motor-driven pump unit GSJB
- 1-9201-EN Transport of Lubricants in Centralized Lubrication Systems
- DSK2-008-00-EN Grease lubricating pump (FF)
- DSK2-005-00-EN Grease lubricating pump (FB)

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