

# POE / PFE Plunger Pumps

1-1111-US

**Manually or pneumatically actuated**

**POE(P) for oil**

**PFE(P) for fluid grease, NLGI grades 000 to 0**



POE-15-0.5



POEP-15-1.0W



POE-15-1.7

These manually or pneumatically actuated plunger pumps were developed for intermittently operated, single-line centralized lubrication systems with piston distributors. They come with the set of valves required for pressure relief and pressure limitation.

The lubricant reservoirs made of transparent plastic are available in three different sizes: 0.5; 1.0 or 1.7 liters.

Versions with / without filling-level switches for the monitoring of critical levels of lubricant.

## Startup

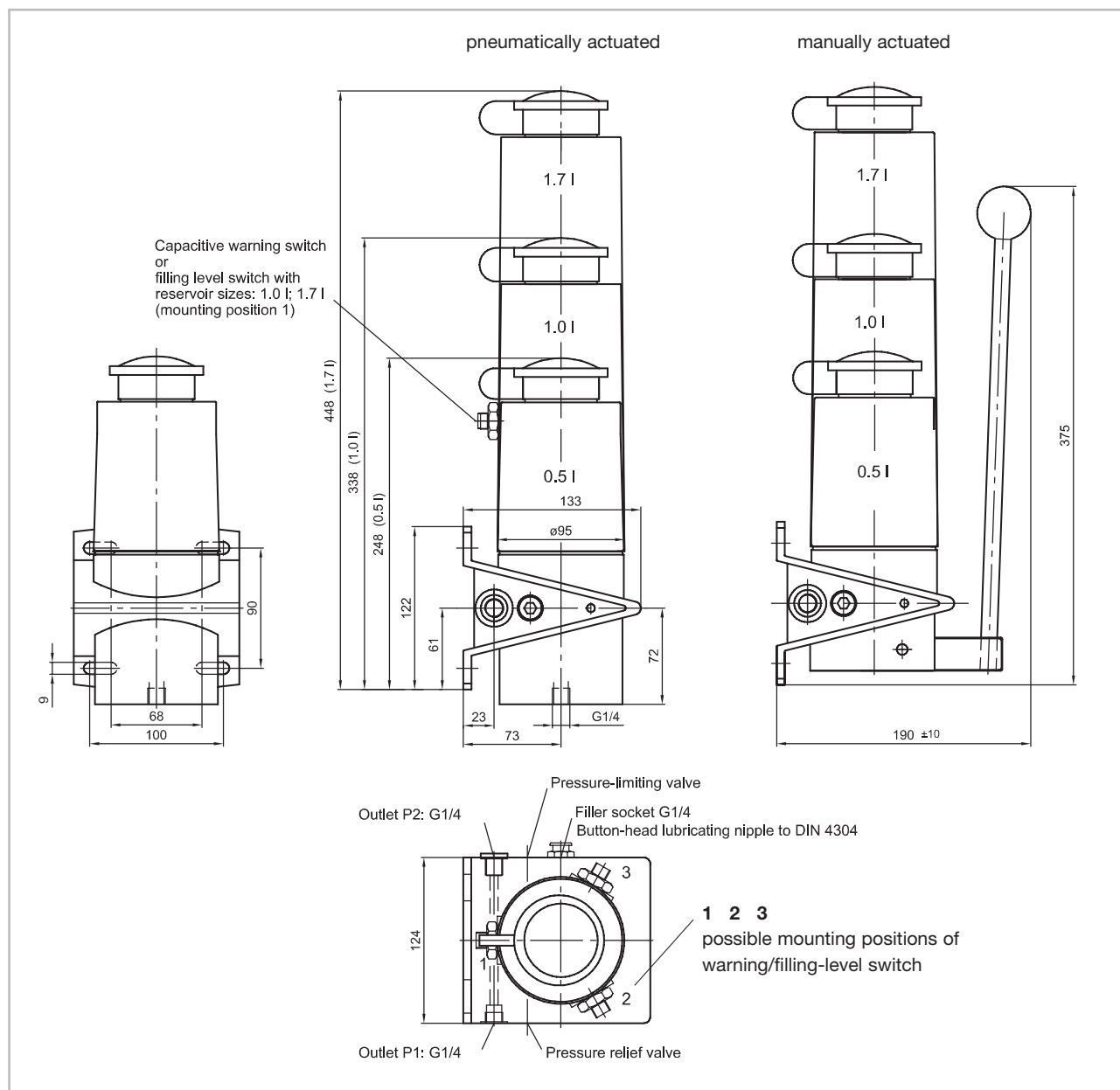
Fill the reservoir with lubricant (POE with oil, PFE with fluid grease) and operate the pump at intervals of 2-3 seconds until lubricant emerges at every lube point. A properly laid system will vent itself!

The venting procedure is helped by

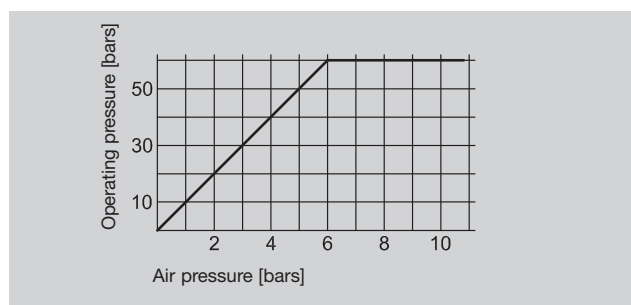
- opening the ends of the main lines until bubble-free oil or fluid grease emerges there,
- filling long secondary lines
  - especially from distributor ports with small metered quantities – before connecting them to the lube point.

## Maintenance

1. Check the level of oil/grease and top up the reservoir in good time!  
Use lubricant that conforms to the machine manufacturer's instructions.  
Always top up oil with a strainer!
  2. After the machine has run for an extended period of time check all the tubing connections for tight fits and actuate the pump to check whether lubricant emerges at all the lube points.
- Only use original VOGEL spare parts.



### Pressure chart for pneumatic drive



#### Please note!

Cutting-sleeve screw unions conforming to DIN 2353 or VOGEL quick connectors have to be used as connection fittings when the system's hydraulic pressure exceeds 45 bars.

### Technical data

#### Pump

Drive	manual or pneumatic
Reservoir unit	0.5 l, 1.0 l and 1.7 l
Reservoir material	plastic (PP), transparent
Outlet ports	G 1/4, left or right
Compressed air port	G 1/4 (on bottom of pump)
Max. operating pressure	30 bars (manual operation) 60 bars (pneum. operation)
Delivery rate per stroke	15 ccm
Pressure ratio for pneum. pumps:	10:1
Actuating air volume =	delivery rate x pressure-limiting valve x pressure [bars]
Ambient temperature	0 to +60 °C

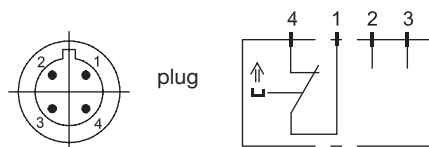
#### Fluid

POE	mineral oils, synthetic and ecofriendly oils; service viscosity 20 to 1500 mm <sup>2</sup> /s
PFE	fluid grease, NLGI grades 000 to 0

**POE: Filling level switch**

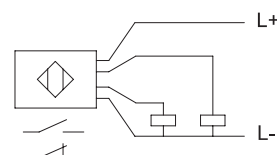
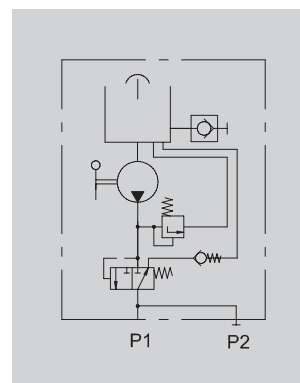
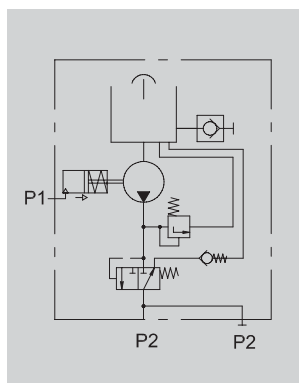
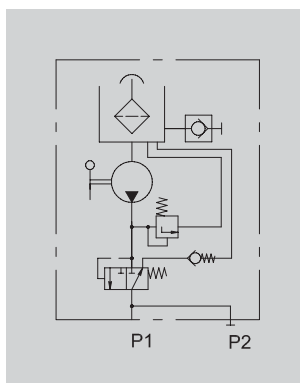
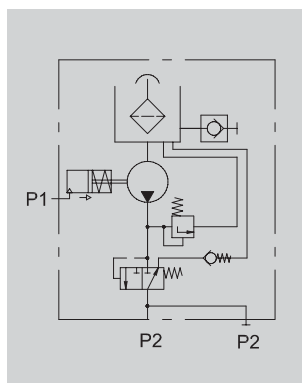
for monitoring of min. oil level

Function	Contact opens when critical level is reached
Max. switched voltage	42 V DC
Max. switching capacity	50 W
Plug connection	4-pole circular plug M12x1
Mounting positions	1, 2 or 3 possible; from factory in mounting pos. 2

**Circuit****PFE: Warning switch**

for monitoring of min. grease level

Function	PNP / NO-NC
Switched voltage	10 ... 36 V DC
Load current at switch output	max. 150 mA
Type of enclosure	IP 67
Connection	2m PVC cable or 4-pole circular plug M8x1
Mounting position	1, 2 or 3 possible; from factory in mounting pos. 2

**Circuit****Hydraulic layouts****POEP (pneumatic)****POE (manual)****PFEP (pneumatic)****PFE (manual)****Types for oil**

without filling level switch Order No.	with filling level switch Order No.	Delivery rate [ccm/stroke]	Reservoir capacity [liters]	Drive	Max. operating pressure (pressure-limiting valve) [bars]
POE-15-0.5	–	15	0.5	manual	30
POEP-15-0.5	–	15	0.5	pneumatic	60
POE-15-1.0	POE-15-1.0W	15	1.0	manual	30
POEP-15-1.0	POEP-15-1.0W	15	1.0	pneumatic	60
POE-15-1.7	POE-15-1.7W	15	1.7	manual	30
POEP-15-1.7	POEP-15-1.7W	15	1.7	pneumatic	60

**Types for fluid grease**

without warning switch Order No.	with warning switch Order No.	Delivery rate [ccm/stroke]	Reservoir capacity [liters]	Drive	Max. operating pressure (pressure limiting valve) [bars]
PFE-15-0.5	–	15	0.5	manual	30
PFEP-15-0.5	–	15	0.5	pneumatic	60
PFE-15-1.0	PFE-15-1.0W1(2) <sup>1)</sup>	15	1.0	manual	30
PFEP-15-1.0	PFEP-15-1.0W1(2) <sup>1)</sup>	15	1.0	pneumatic	60
PFE-15-1.7	PFE-15-1.7W1(2) <sup>1)</sup>	15	1.7	manual	30
PFEP-15-1.7	PFEP-15-1.7W1(2) <sup>1)</sup>	15	1.7	pneumatic	60

<sup>1)</sup> ...W1 = warning switch connection 2 m PVC cable; ...W2 = warning switch connection 4-pole circular plug, M8x1



A brand of the SKF Group

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**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 centralized 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.