

POE / PFE Plunger Pumps

POE(P) for oil; PFE(P) for fluid grease, NLGI grades 000, 00

POE-15-1.0



POEP-15-1.0 W



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!

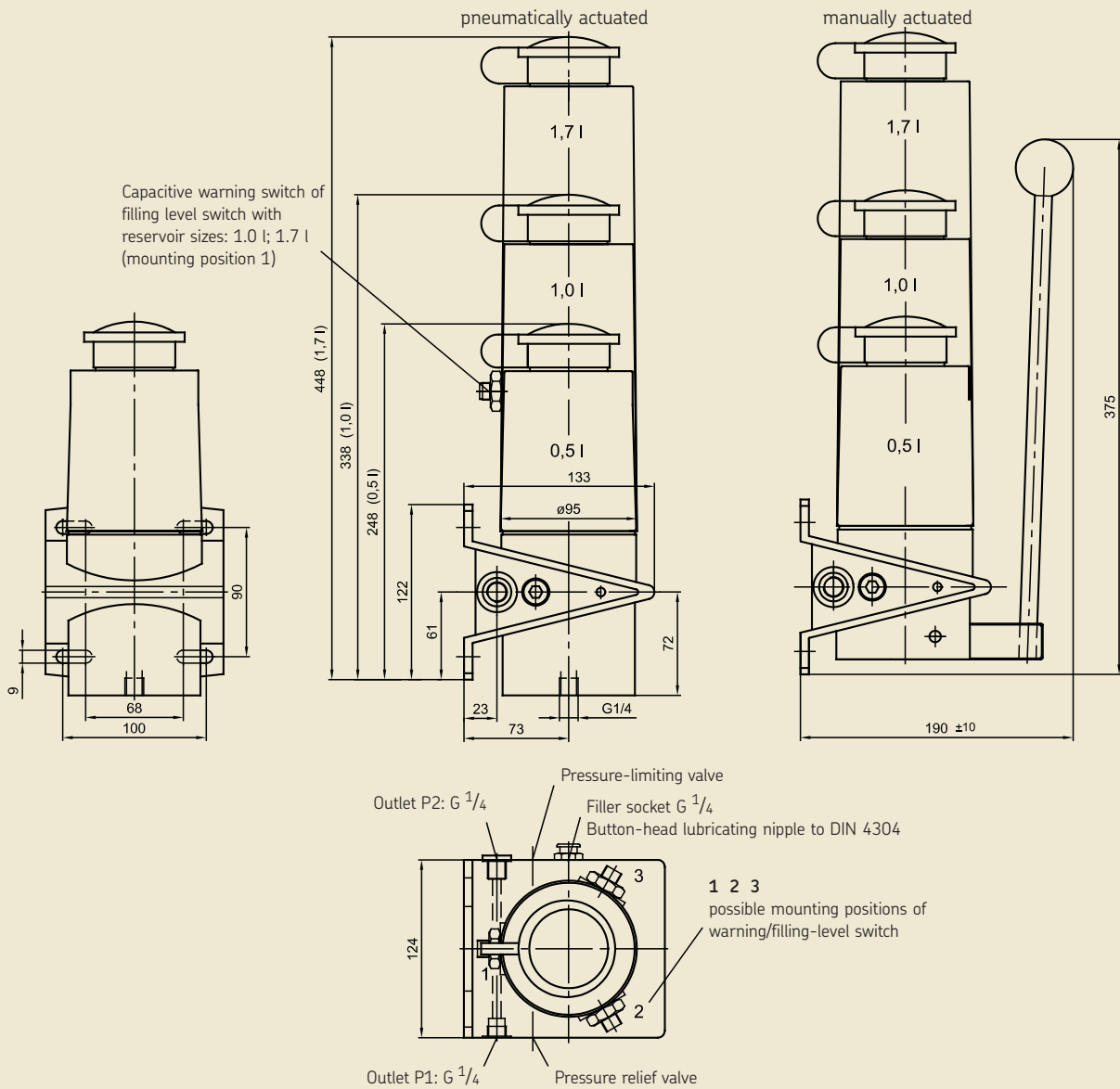
The venting procedure is helped by

- 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.

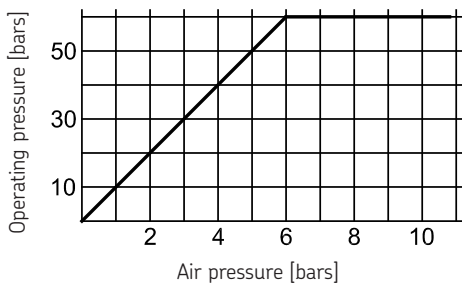
Maintenance

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 SKF spare parts.



Pressure chart for pneumatic drive



Please note! Cutting-sleeve screw unions conforming to DIN 2353 or quick connectors have to be used as connection fittings when the system's hydraulic pressure exceeds 45 bars. See important product usage information on the back cover.

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 cm³
- Pressure ratio for pneumatic 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 mm²/s
- PFE fluid grease, NLGI grades 000, 00

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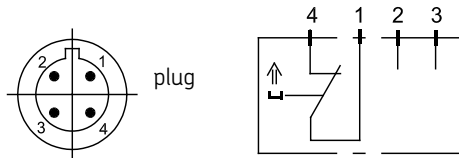
POE: Filling level switch for monitoring of min. oil level

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 M12×1
 Mounting positions 1, 2 or 3 possible (from factory 2)

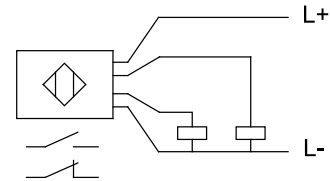
PFE: Warning switch for monitoring of min. grease level

Function PNP / NO-NC
 Switched voltage 10...36 V DC
 Load current at switch output max. 150 mA
 Schutzart IP 67
 Anschluss 2 m PVC cable or 4-pole circular plug M8×1
 Mounting position. 1, 2 or 3 possible (from factory 2)

Circuit POE



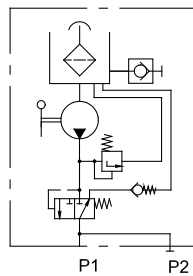
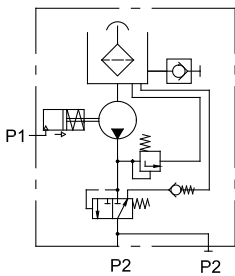
Circuit PFE



Hydraulic layouts

POEP (pneumatic)

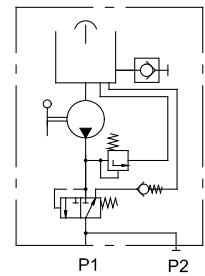
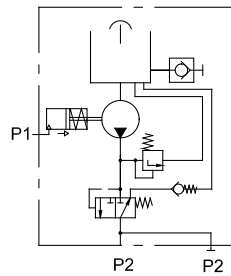
POE (manual)



Hydraulic layouts

PFEP (pneumatic)

PFE (manual)



Pump overview

without filling level switch Order No.	with filling level switch Order No.	Fluid	Delivery rate [cm ³ /stroke]	Reservoir capacity [liters]	Drive	Max. operating pressure (pressure-limiting valve) [bars]
POE-15-0.5	–	oil	15	0.5	manual	30
POEP-15-0.5	–	oil	15	0.5	pneumatic	60
POE-15-1.0	POE-15-1.0W	oil	15	1.0	manual	30
POEP-15-1.0	POEP-15-1.0W	oil	15	1.0	pneumatic	60
POE-15-1.7	POE-15-1.7W	oil	15	1.7	manual	30
POEP-15-1.7	POEP-15-1.7W	oil	15	1.7	pneumatic	60
PFE-15-0.5	–	fluid grease	15	0.5	manual	30
PFEP-15-0.5	–	fluid grease	15	0.5	pneumatic	60
PFE-15-1.0	PFE-15-1.0W1(2) 1)	fluid grease	15	1.0	manual	30
PFEP-15-1.0	PFEP-15-1.0W1(2) 1)	fluid grease	15	1.0	pneumatic	60
PFE-15-1.7	PFE-15-1.7W1(2) 1)	fluid grease	15	1.7	manual	30
PFEP-15-1.7	PFEP-15-1.7W1(2) 1)	fluid grease	15	1.7	pneumatic	60

1) ...W1 = warning switch connection 2 m PVC cable; ...W2 = warning switch connection 4-pole circular plug, M8×1

Order No. 1-1111-EN

Subject to change without notice! (07/2009)

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

1-9201-EN Transport of Lubricants in Centralized Lubrication Systems

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