

Gear and Cam Pumps

Product series ZP, 206

For oil.
For use in SKF CircOil centralized lubrication systems.

Gear pump ZP1



Cam pump 206-100



The gear and cam pumps in this brochure are **lubricant pumps** that can be used for a large number of tasks.

The indicated delivery rates apply to an operating viscosity of 140 mm²/s and a back pressure of 5 bars. If the operating viscosities or back pressures deviate from these values, the delivery rate and power requirements will change.

Permissible operating viscosity:
20 to 1000 mm²/s.

Filtering

The pumps require filtration of the lubricant for a maximum particle size of 100 µm.

If the metering elements, valves, flow monitors, etc. as well as the friction points to be supplied require finer filtration, that must be provided for in the delivery line (recommended value 25 µm).

Gear Pumps

For clockwise or counterclockwise rotation, with constant direction of rotation and delivery

Table 1

| Order No. | Delivery rate at 1 400 r/min [l/min] | Max. back pressure [bar] | Required drive power [kW] | Suction head ¹⁾ [mm] | Direction of rotation | Figure |
|---------------|--------------------------------------|--------------------------|---------------------------|---------------------------------|-----------------------|--------|
| ZP12-2 | 1.2 | 25 | 0.18 | 500 | right | 1 |
| ZP1 ZP1-S1 | 2.5 | 20 | 0.18 | 1000 | right left | 2 |

Direction of rotation = viewing on the drive shaft.

Order adapters with ports tapped for solderless tube connection separately.

¹⁾ with open delivery line at 1 400 r/min

Figure 1

ZP12-2

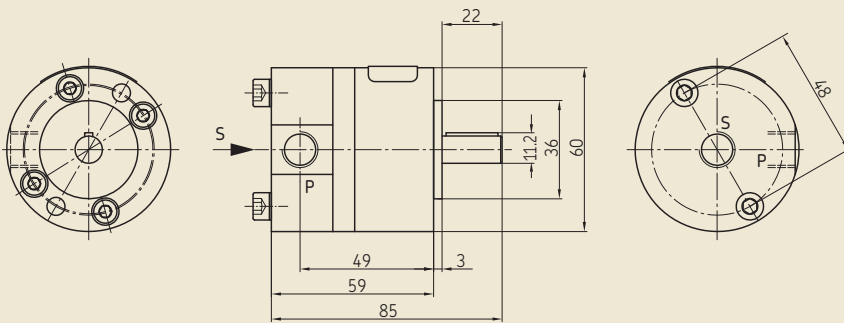
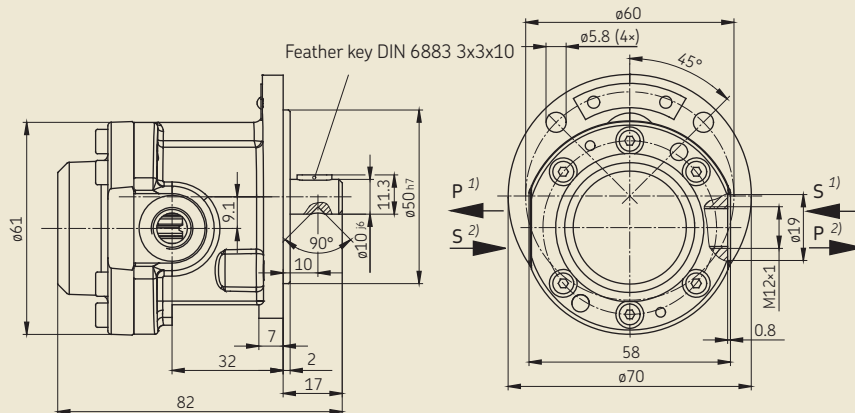


Figure 2

ZP1, ZP1-S1



S = suction port, P = pressure port

- ¹⁾ ZP1: Direction of rotation right (viewing on the drive shaft)
- ²⁾ ZP1-S1: Direction of rotation left (viewing on the drive shaft)

CAUTION

The important information on product usage located on the back cover applies to all systems described in this brochure.

Cam Pumps

For clock- or counterclockwise rotation, but for constant direction of delivery with changing direction of rotation

With these valveless piston pumps, the piston is driven directly via a cam so that only three constantly moving elements are involved.

This configuration results in dependable operation and a long service life.

The fluids to be pumped must have enough lubricity for the pump to lubricate itself.

Table 2

| Order No. | Delivery rate ¹⁾ at 1500 r/min [l/min] | Max. back pressure [bar] | Permissible speed range [r/min] | Suction- head ²⁾ [mm] | Ext. suction and delivery tube diam. [mm] | Direction of rotation | Model | Figure |
|-------------------|---|--------------------------------|---------------------------------------|--|--|--------------------------|-----------------------|--------|
| 206-100 | 1.3 | 5 | 50–1500 | 1000 | 8 10 | any | with shaft butt | 3 |
| 206-100-5 | 2.6 | 3 | | | | | | 4 |
| 206-100-10 | 1.3 | 5 | 50–1500 | 1000 | 8 10 | any | with slotted coupling | 5 |
| 206-100-50 | 2.6 | 3 | | | | | | 6 |

Order adapters with ports tapped for solderless tube connection separately.

¹⁾ The delivery rate depends on the speed, viscosity, suction and delivery head (→ diagram 1).

²⁾ With open delivery line; the suction head depends on the speed and viscosity.

Figure 3

206-100

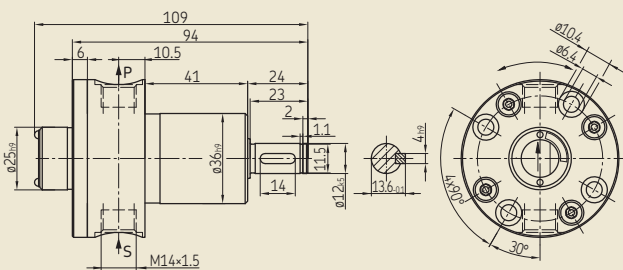


Figure 4

206-100-5

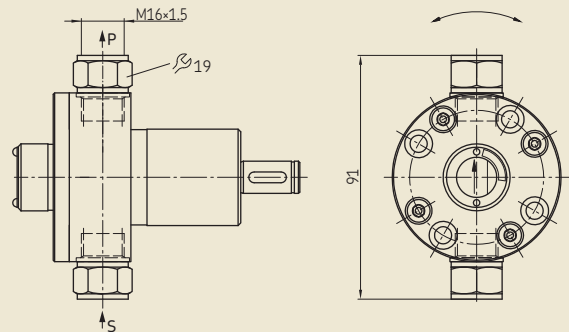


Figure 5

206-100-10

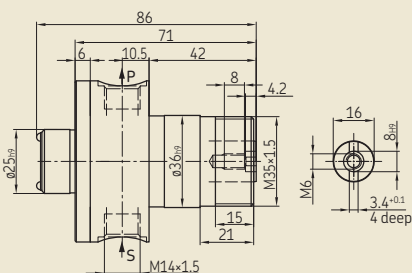


Figure 6

206-100-50

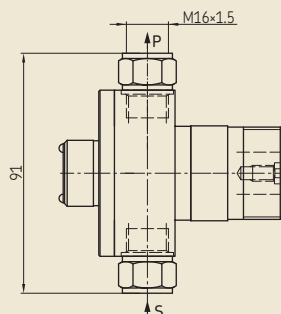
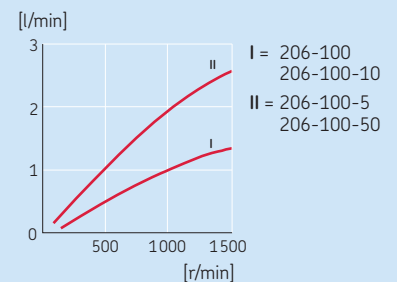


Diagram 1



S = suction port, P = pressure port

→ Diagram 1 shows the delivery rate for a suction head of 0.5 m at 3 bars back pressure for a mineral oil with a viscosity of 140 mm²/s.

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These competence areas include bearings and units, seals, lubrication systems, mechatronics, and a wide range of services, from 3-D computer modelling to cloud-based condition monitoring and asset management services.

SKF's global footprint provides SKF customers with uniform quality standards and worldwide product availability. Our local presence provides direct access to the experience, knowledge and ingenuity of SKF people.

Important information on product usage

SKF and Lincoln 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 (1 013 mbar) by more than 0,5 bar at their maximum permissible temperature.

Further brochures:

1-1204-3-EN *Gerotor Pumps, Product series 143*

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

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