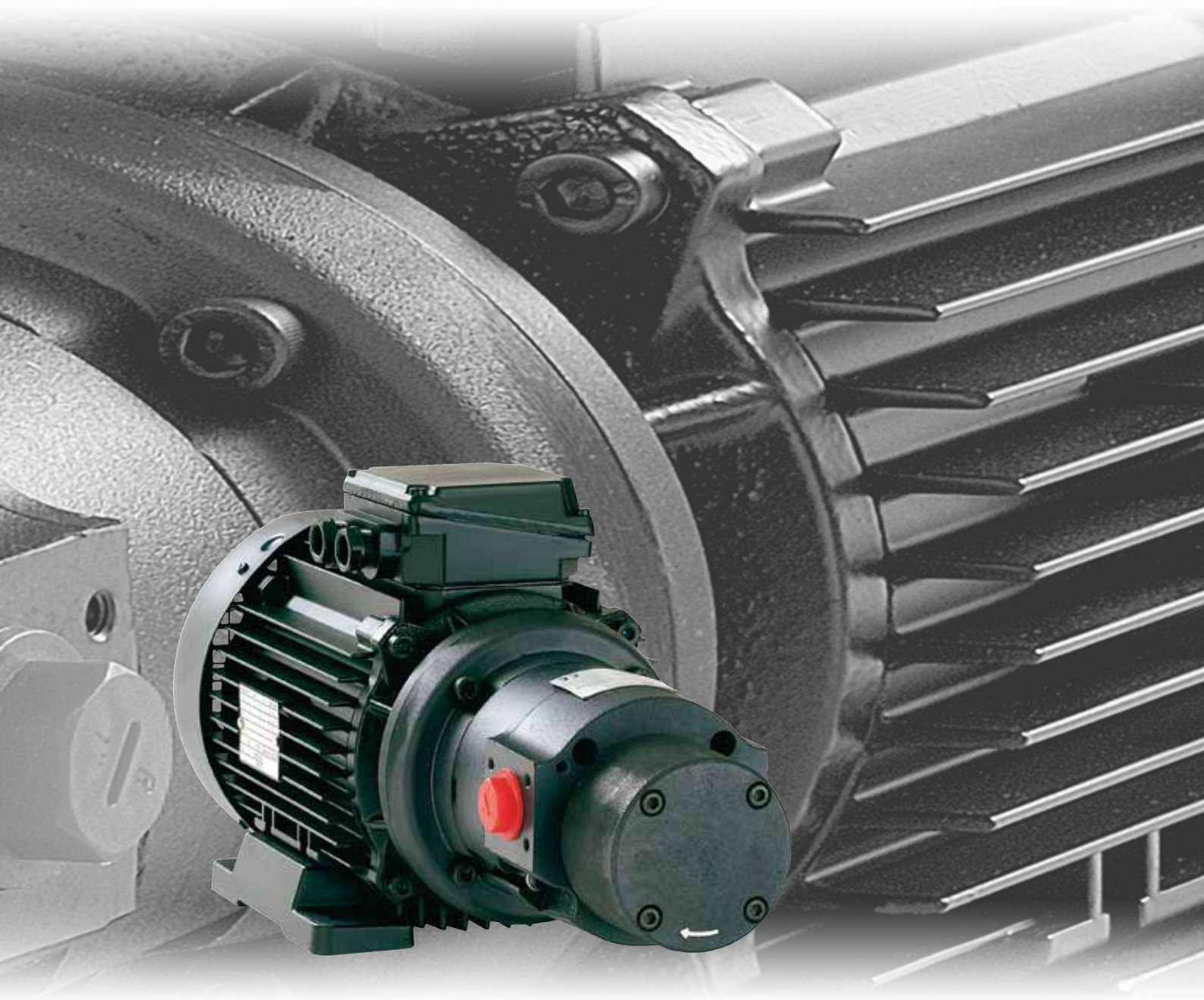




*The Professional Choice*

# QPM3

*Gerotor pump*



OLAER QPM3 | Low pressure pump



Olaer is a global player specialising in innovative, efficient system solutions for temperature optimisation and energy storage.

All over the world, our products are working in the most diverse environments and applications.

# Low pressure pump

## - for high efficiency

### Properties

Olaer's QPM range of gerotor type of low pressure pumps has been a big seller on the market for many years. High performance, light and compact, low noise level as well as low energy consumption are strong arguments for having a QPM3 installed in your system for the circulation of oil. The QPM3 pump has a dual shaft bearing and a resilient connection that guarantees safe and secure operation. The pump conforms to standard EN 60034-1/IEC 60072, version B3/B14, which allows the use of different makes of electric motor.

### Construction and advantages

- The special design of the pressure relief groove ensures low flow pulsations and low noise level.

- Double-feed gerotor provides excellent suction ability.
- Dual shaft bearings provides for long service life.
- The design of the pressure chambers ensures low pressure pulsations.
- Few internal parts make the pump light and compact.

### Many areas of use

QPM3 is ideal for:

- circulation of oil in cooling and oil filter systems,
- circulation of oil in industrial hydraulic systems,
- filling and draining of oil in tanks,
- transfer of oil in stationary or mobile oil storage depots.



**QPM3 is compatible with:**

- Mineral oils
- Synthetic oils
- Vegetable oils

When operating with other fluids always consult your local Olaer office.

**Bypass valve**

Internal or external bypass valve with opening pressure 5 or 10 bar.



**Optimized**

QPM3 is optimized for use in Olaer's DU03 oil filters, WEG03 cooling and filter systems and LOC types of cooling systems.

**Cost effective**

Simple and robust design = cost effective.

**Consult your local Olaer office for:**

- Special models
- Dimensioning
- Extreme operating conditions

**Olaer range of low pressure pumps**

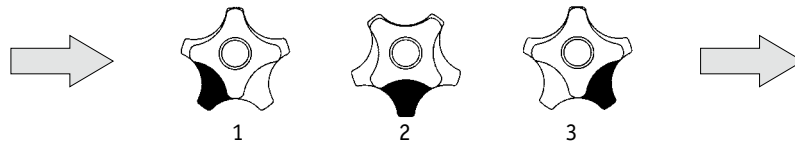
QPM3 type of gerotor pump is available with pump capacity:

OHP type of screw pump is available with pump capacity:

QPM3-20	QPM3-40	QPM3-60	QPM3-80	OHP 100	OHP 150	OHP 190
20 l/min	40 l/min	60 l/min	80 l/min	100 l/min	150 l/min	190 l/min

## Operating principles of the gerotor

The gerotor principle is based on an inner and an outer rotor. The inner rotor has one less tooth than the outer. The inner rotor has its centreline positioned at a fixed eccentricity from the centreline of the outer rotor. As the rotors rotate about their own respective axes oil is drawn into the enlarging chamber. The process occurs constantly for each chamber, providing a smooth pumping action.



*Step 1: Oil is drawn into the gerotor*

*Step 2: The opening between the "gear wheels" is closed. Suction side and pressure side are sealed from each other.*

*Step 3: The oil is forced out into the pressure channel.*

## What to consider before installation

- We recommend to install the QPM3 in a horizontal position.
- Minimise the difference in height between the pump inlet and the tank fluid level, preferably with the pump below the tank fluid level (max. 5 m).
- Use by-pass valves if the system is fitted with shutoff valves etc. or if the pump is exposed to cold starts.
- A low suction height and a short inlet line provide optimum pump performance. The diameter of the inlet line must be equal to, or larger than, the pump connection.
- For long service life, oil cleanliness should, according to ISO 4406, not be below 17/15.
- Can be fitted as required in steps of 90° in relation to the electric motor.

## Many areas of use

QPM3 is ideal for:

- The electric motor may be overloaded due to cold starting and operation with viscous fluids – choose the right electric motor!
- Oil temperature must not exceed 100°C. In the event of higher temperature, always consult your local Olaer office.
- Recommended ambient temperature -20°C – +40°C.
- Recommended max. working pressure: 10 bar. For operation at higher working pressures, consult your local Olaer office.
- Maximum oil viscosity: 800 cSt.
- Maximum suction side pressure: 0.5 bar.
- Maximum negative pressure in inlet line: 0.4 bar with oil filled pump.



- in Fluid Energy Management

# Global perspective

*and local entrepreneurial flair*



Olaer is a global player specialising in innovative, efficient system solutions for temperature optimisation and energy storage. Olaer develops, manufactures and markets products and systems for a number of different sectors, e.g. the aircraft, engineering, steel and mining industries, as well as for sectors such as oil and gas, contracting and transport, farming and forestry, renewable energy, etc.

All over the world, our products operate in the most diverse environments and applications. One constantly

repeated demand in the market is for optimal energy storage and temperature optimisation. We work at a local level with a whole world as our workplace – local entrepreneurial flair and a global perspective go hand in hand.

Our local presence, long experience and a wealth of knowledge combine with our cutting-edge expertise to give you the best possible conditions for making a professional choice.