

RADIAL PISTON PUMP 250 CM³ VARIABLE DISPLACEMENT

New version available for high pressure up to 350 bar (5,000 psi) hydraulic systems



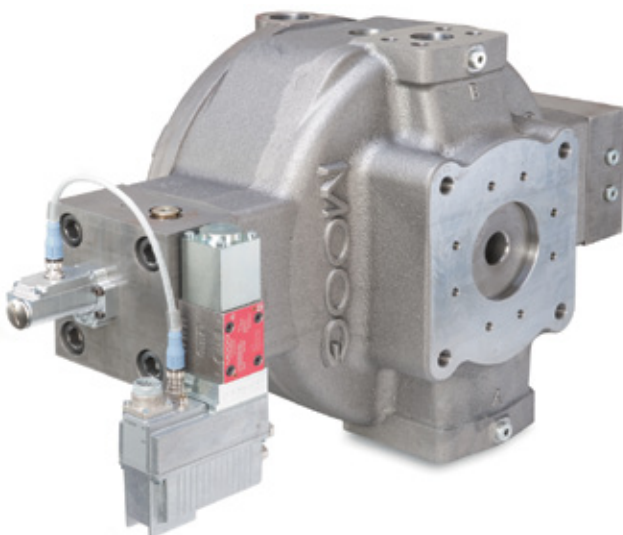
A new version of the Moog Radial Piston pump is now available with variable displacements up to 250 cm³ for applications requiring high system pressures up to 350 bar (5,000 psi) such as metal forming machinery and presses, heavy industry and plastics machinery.

The new RKP with variable displacement up to 250 cm³ is the product of choice for highly dynamic control of hydraulic flows and pressures. The pump is available in high pressure version for continuous pressures up to 350 bar (5,000 psi) and offers full drive-through capability. The pump is designed for the use in open-circuit systems with large suction port and a flow-optimized suction path, ensuring robust suction behaviour, high speed limit and low noise. The 9-piston rotary group - used in the RKP design - minimizes the piston clearance volume. This design offers the lowest pressure ripple contributing lowest noise emission compared with other manufacturer's designs.

The RKP250 is also equipped with the proven, robust control system with sliding stroke ring that is used in the other sizes of RKP pump. The exclusive use of ferrous metals with hardened, wear-resistant surfaces at the part contacts lead to an outstanding longevity. Special pump versions for use with HFC and HFD fluids are also available.

Moog offers a modular design concept with a range of different compensator options: Pressure compensator (F2), combined pressure and flow compensator (R1), fixed displacement (B1), dual displacement (N1)

The RKP-D with a highly dynamic electro-hydraulic control (D1 to D8) can easily be configured with the Moog Pump Configuration Software. Status information, set values and actual values are displayed graphically for quick and easy performance monitoring, trouble shooting and tuning.



ADVANTAGES

- Proven, robust design with long service life, low noise and high efficiency
- Combinations with other RKP and pumps with standard interfaces (SAE-A, -B and -C)
- A 500 cm³ displacement possible with the full torque drive through capability of a double pump arrangement
- Flexible configuration with a broad range of compensator types and complex control options
- Well suited for a broad variety of special fluids (HFC, HFD, others upon request)
- Explosion-proof versions available

APPLICATIONS

- Presses
- Metal forming machinery
- Steel production machinery
- Injection molding and die casting machinery

TECHNICAL DATA

Displacement [cm³/rev]	250
Type of construction	Pump for open circuit with various control devices
Type of mounting	End mounting, centering and hole-circle Ø to ISO 3019-2 (metric) Mounting flange to ISO 3019-1 (inch) Mounting flange to ISO 3019-2 (metric)
Mounting position	Any
Weight [kg (lb)]	236 (520)
Mass moment of inertia [kg cm² (10⁻⁴ lbf in s²)]	1,555 (13,762)
Drain line [mm (in)]	35 (1 1/4)
Type of drive	Direct drive with coupling (please inquire with your Moog contact for other types)
Ambient temperature range [°C (°F)]	-15 to +60 (+5 to +140)
Maximum housing pressure	2 bar (29 psi) (1 bar (15 psi) gauge pressure)
Maximum speed	
At inlet pressure 0.8 bar (12 psi) absolute [min ⁻¹] ¹⁾	1,800
At inlet pressure 1 bar (15 psi) absolute [min ⁻¹] ¹⁾	1,850
High pressure series	
Continuous pressure [bar (psi)]	350 (5,000)
Maximum pressure [bar (psi)] ²⁾	385 (5,500)
Pressure peak [bar (psi)]	420 (6,000)
Viscosity	Same viscosity as all other displacements, see catalog.
Filtering³⁾	Same filtering as all other displacements, see catalog.

- 1) Maximum speed increase upon request
 - 2) Maximum pressure according to DIN 24312
 - 3) Dirt particles retention rate > 20 µm is 1:75, i.e. 98.67 %
- Note: For special fluids like HFC and HFD the above pressure, viscosity and filtration parameters may be changed.

Moog has offices around the world. For more information or the office nearest you, contact us online.

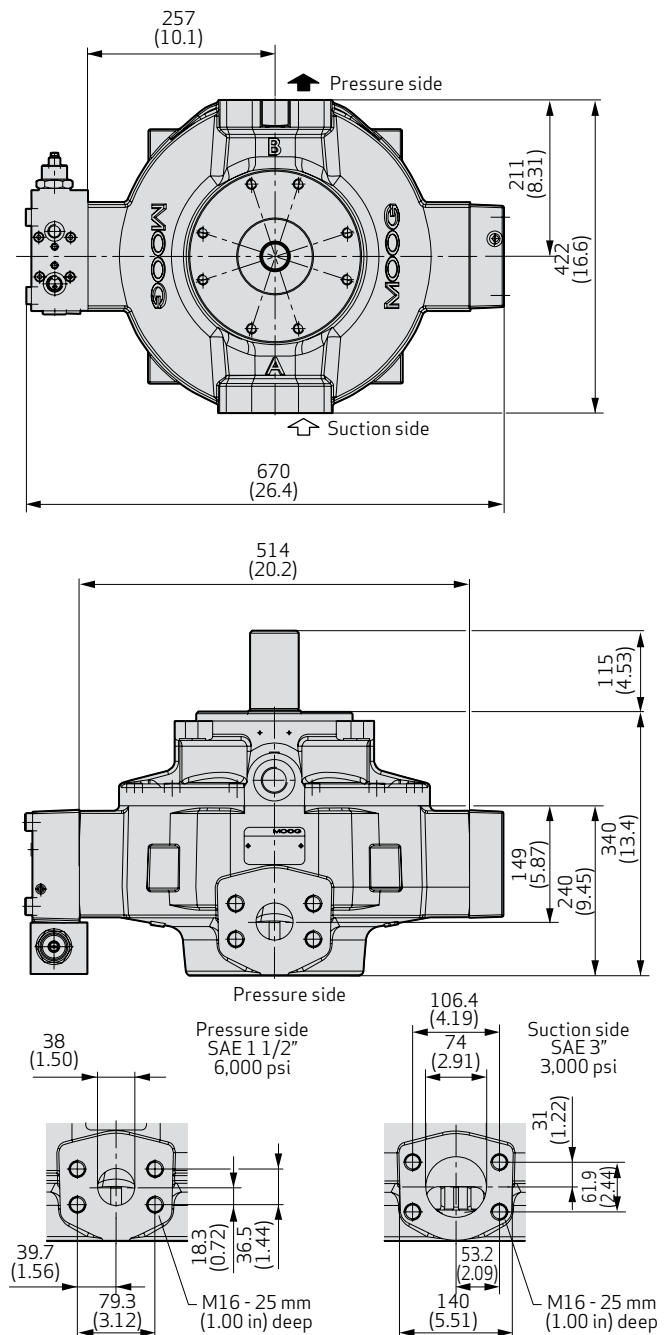
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This technical data is based on current available information and is subject to change at any time. Specifications for specific systems or applications may vary.



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