

RADIAL PISTON PUMPS

Features of the second generation RKP-II

- Proven product with high reliability
- Low noise emission for noise-sensitive applications
- Rugged and compact design
- Wide range of control options
- Suitable for various fluids such as mineral oil, transmission oil, biodegradable oil, cutting emulsion, HFA, HFB, HFC, HFD, Skydrol® and Hyjet®
- ATEX-certified version available
- Multiple pump arrangements up to a displacement of 310 cm³/U [82 cm³/rev]¹
- Tandem mounting of auxiliary pumps with SAE-A, -B, and -C flange arrangements

The RKP-II is also available with digital control (RKP-D²).

Features of the digital control include:

- Fieldbus interface
- Flow, pressure, and horsepower control
- Plug-and-play parameters precalibrated in the factory
- Remote maintenance via PC
- Flexible configuration of parameters

Benefits of the RKP-D

- Full functionality independent of operation mode (analog or fieldbus)
- High dynamics for shortest cycle time and highest precision
- Flexible configuration and commissioning via PC-based software tool
- Flexible multiple pump management using master-slave mode and hybrid mode
- User-friendly visualization and operation via Moog's configuration tool with integrated oscilloscope



RKP-II



RKP-D

Size and displacement	cm ³ /rev	19	32	45	63	80	100	140
Theoretical flow (basis mineral oil) at 1,500 rpm at 1,800 rpm	l/min [US gpm]	28.5 [7.5] 34.2 [9.0]	48 [12.6] 57.6 [15.2]	67.5 [17.7] 81 [21.4]	94.5 [24.8] 113.4 [30.0]	120 [31.5] 144 [38.0]	150 [39.5] 180 [47.6]	210 [55.2] 252 [66.6]
Continuous pressure standard design Continuous pressure high-pressure design	bar [psi]	280 [4,000] 350 [5,000]	280 [4,000] 350 [5,000]	280 [4,000] --	280 [4,000] 350 [5,000]	280 [4,000] 350 [5,000]	280 [4,000] --	280 [4,000] --
Maximum pressure standard design Maximum pressure high-pressure design	bar [psi]	315 [4,500] 385 [5,500]	315 [4,500] 385 [5,500]	315 [4,500] --	315 [4,500] 385 [5,500]	315 [4,500] 385 [5,500]	315 [4,350] --	315 [4,500] --
Pressure peak standard design³ Pressure peak high-pressure design³	bar [psi]	350 [5,000] 420 [6,100]	350 [5,000] 420 [6,100]	350 [5,000] --	350 [5,000] 420 [6,100]	350 [5,000] 420 [6,100]	350 [5,000] --	350 [5,000] --
Hydraulic fluid temperature range	Mineral oil to DIN 51524	-15 to +80 °C [5 to 176 °F]						
Ambient temperature range	°C [°F]	-15 to +60 °C [5 to 140 °F]						
Viscosity permissible recommended	mm ² /s [cSt]	12–100 mm ² /s [cSt] 16–46 mm ² /s [cSt] at +40 °C						
Filtering⁴		NAS 1638, level 9 ISO/DIN 4406, level 20/18/15 obtained with filter fineness of β ₂₀ = 75						

Control Options ⁵		Radial Piston Pump V [cm ³ /rev]						
B	Mechanical stroke adjustment (V=const.)	19	32	45	63	80	100	140
C	Servo control	19	32	45	63	80	100	--
D	Electrohydraulic control (RKP-D)	19	32	45	63	80	100	140
F	Pressure compensator, adjustable	19	32	45	63	80	100	--
H	Remote pressure compensator, hydraulically controlled	19	32	45	63	80	100	--
J	Combined pressure and flow compensator	19	32	45	63	80	100	--
R	Combined pressure and flow compensator with P-T control notch	19	32	45	63	80	100	140
S	Constant horsepower control	--	32	45	63	80	100	140

1 At 210 bar [3000 psi]

2 Suitable for mineral oil, transmission oil, biodegradable oil, special fluids such as cutting emulsion, HFC, HFD

3 To DIN 24312

4 Dirt particles retention rate >20 µm is 1:75, i. e. 98.67%

The products described herein are subject to change without notice. In case of doubt, please contact Moog.

5 Selected control options only. Please refer to our catalog for additional options