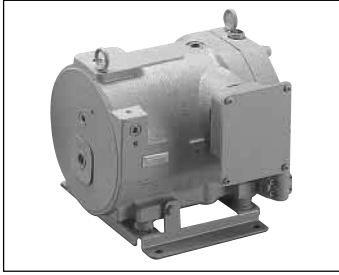


RP series rotor pump

- Variable displacement pump integrated in electric motor.



Features

- **Low Noise**
The adoption of our own low noise technology realizes to reduce the operation noise so great as 10~15dB (in comparison with our own products) and improve the sound quality.
- **Compactness**
The one housing structure enables it to shorten the length so much as 40% in comparison with our existing models. It results in easy handling and compactness of the machine.
- **Low pulsation**
The pulsation has reduced by 50% in comparison with our existing models.
- **High reliability**
Because of the hermetic structure such that the shaft is not out of the casing, it doesn't need an oil seal and no oil leak will happen. Besides, the temperature rise in the motor coil is small due to the motor oil cooling structure. Consequently, the structure makes it possible to operate pumps in a long term overload conditions.
- **Coping with CE**
Since these models are equipped with the terminal box of IP54 based on the International Standards (IEC34-1 and others), the models are the best suited for coping with the Europe safety standards (CE).

Nomenclature

- **Pressure compensator control**

RP ** A * - ** * - 30 ** - *

1 2 3 4 9 10 11 12 13

- **Combination control (Self pressure method)**

RP ** C * * H - ** * - 30

1 2 3 5 6 7 9 10 11

- **Combination control (Self operated valve method)**

RP ** C * * J * - ** * - 30

1 2 3 5 6 7 8 9 10 11

(1) Model No.

RP : RP series rotor pumps

(2) Displacement volume

08 : 8.0cm³/rev
15 : 14.8cm³/rev
23 : 24.4cm³/rev
38 : 37.7cm³/rev

(3) Control method I

A : Pressure compensator control
C : Combination control

(4) Pressure adjusting range

(refer to the pressure adjusting range table)

(5) Low pressure adjusting range

1 : 2.5~7MPa {25~70kgf/cm²}
2 : 2.5~14MPa {25~140kgf/cm²}

(6) High pressure adjusting range

1 : 2.5~7MPa {25~70kgf/cm²}
2 : 2.5~14MPa {25~140kgf/cm²}
3 : 3.5~21MPa {35~210kgf/cm²}

(7) Control method II

H : Self pressure method
J : Solenoid operated valve method

(8) Voltage for the solenoid operated valve

A : AC100V (50/60Hz), AC110V (60Hz)
B : AC200V (50/60Hz), AC220V (60Hz)
P : DC24V

(9) Motor output (refer to the motor specifications)

(10) Voltage specifications

No mark : AC200V (50/60Hz), AC220V (60Hz)
X : AC230V (50Hz)
Y : AC380V (50Hz), AC400V (50/60Hz)
AC415V (50Hz), AC440V (60Hz)
AC460V (60Hz)

(11) Design number (design number is subject to change)

(12) Control method III

No mark : Without remote control system
RC : With remote control system

(13) Pump installations

No mark : Foot installation
T : Vertical installation ★1

Note) ★1 The type of the vertical installation is only applied to RP08 or RP15.

★1 Since the vertical installation type doesn't effectively use antivibration pads, you might let the installation space have a sufficient stiffness so as to apply the structure absorbing vibration. The insufficient stiffness may cause noise or vibration, etc..

(4) : Pressure adjusting range table (pressure compensator control)

Mark	Pressure adjusting range MPa {kgf/cm ² }	Without remote control system				With remote control system			
		RP08	RP15	RP23	RP38	RP08	RP15	RP23	RP38
1	1.5~7 {15~70}	○	○	○	○	—	—	—	—
1	2.0~7 {20~70}	—	—	—	—	○	—	—	—
2	1.5~14 {15~140}	○	○	○	○	—	—	—	—
2	2.0~14 {20~140}	—	—	—	—	○	○★1	○★2	○
3	2.0~21 {20~210}	—	—	—	—	—	○★2	○★3	○★4
3	3.5~21 {35~210}	—	○★2	○★3	○★4	—	—	—	—

Note) ★1 Applied only to a electrical motor output 1.5 kW.
 ★2 Applied only to a electrical motor output 2.2 kW.
 ★3 Applied only to a electrical motor output 3.7 kW.
 ★4 Applied only to a electrical motor output 5.5 kW.

(9) : Electrical motor output

Mark	Output/Pole number kW/4P	Insulation type	Models applied			
			RP08	RP15	RP23	RP38
07	0.75	E type	○	—	—	—
15	1.5		—	○	—	—
22	2.2		—	○	○	—
37	3.7		—	—	○	○
55	5.5		—	—	—	○

Specifications

Model code	Pumps			Motor				Weight kg
	Theoretical displacement cm ³ /rev	Max. operating pressure MPa {kgf/cm ² }	Displacement adjusting range 60Hz L/min	Out/Pole number kW/4P	Rating amperes A			
					200V (50HZ)	200V (60HZ)	220V (60HZ)	
RP08A*-07-30 (RC)	8.0	14 {140} ★1	4.8~14.0	0.75	3.8	3.4	3.4	30
RP15A*-15-30 (RC)	14.8	14 {140}	12.0~25.0	1.5	6.8	6.0	5.8	45
RP15A*-22-30 (RC)		21 {210}		2.2	9.6	8.8	8.4	
RP15C**H (J)-15-30		21 {210}	Large capacity adjusting range 12.0 ~ 25.0 Small capacity adjusting range 1.0 ~ 10.0	1.5	6.8	6.0	5.8	H:50 (J:52)
RP15C**H (J)-22-30	2.2			9.6	8.8	8.4		
RP23A*-22-30 (RC)	24.4	14 {140}	20.0~42.0	2.2	10.0	9.2	8.7	67
RP23A*-37-30 (RC)		21 {210}		3.7	15.1	14.7	13.4	73
RP23C**H (J)-22-30		21 {210}	A	2.2	10.0	9.2	8.7	H:70 (J:72)
RP23C**H (J)-37-30			B	3.7	15.1	14.7	13.4	H:76 (J:78)
RP38A*-37-30 (RC)	37.7	14 {140}	20.0~64.0	3.7	15.1	14.7	13.4	73
RP38A*-55-30 (RC)		21 {210}		5.5	22.0	21.2	19.6	87
RP38C**H (J)-37-30		21 {210}	Large capacity adjusting range 30.0 ~ 64.0 Small capacity adjusting range 1.0 ~ 25.0	3.7	15.1	14.7	13.4	H:76 (J:78)
RP38C**H (J)-55-30				5.5	22.0	21.2	19.6	H:90 (J:92)

Note) ★1 There is a restriction of application condition for using in a range of 7~14MPa (70~140kgf/cm²).

- JR-G (T) 02 and JRP-G02 are recommended for a relief valve of remote control system.
When the vent port is blocked, the pressure compensation structure doesn't work, and it comes to be a fixed pump state. So, a relief valve should be connected at the discharge of the pump.
- A : RP23-22 Large capacity adjusting range 20.0~42.0 Small capacity adjusting range 1.0~15.0
- B : RP23-37 Large capacity adjusting range 30.0~42.0 Small capacity adjusting range 1.0~25.0