Rotor Pack

Nomenclature

NDR ※※ ※-※※ ※ ※-30-※ ※
1 2 3 4 5 6 7 8 9

1 Basic Model Number
NDR : Rotor Pack NDR Series

2 Pump Size
08 : 8.0cm³/ rev{cc/rev}
15 : 14.8cm³/ rev{cc/rev}
23 : 24.4cm³/ rev{cc/rev}
38 : 37.7cm³/ rev{cc/rev}

3 Max Operating Pressure
1 : 6.9MPa{70kgf/cm²}

4 Tank Capacity
07 : 7L…NDR08
10 : 10L…NDR15
20 : 20L…NDR23
30 : 30L…NDR23/NDR38

5 Motor Capacity
1 : 0.75kW/4P…NDR08
2 : 1.5 kW/4P…NDR15
3 : 2.2 kW/4P…NDR15/NDR23
5 : 3.7 kW/4P…NDR23/NDR38

6 Model Variations
H : Vertical Type
L : Horizontal Type
※The NDR23 and NDR38 series are only available as horizontal models.

7 Design Number (Design Number will be changed without any notice.)

8 Option Number
None : Standard
R : With Return Filter…NDR23/NDR38

9 Option Number
None : Standard
E : Type of Protection IP54 CE

Technical Data

Model	Pump Displacement (cm³/rev)	Motor Capacity	Tank Capacity (L)	Max Operating Pressure MPa{kgf/cm²}	Discharge Rate (L/min) 50/60Hz	First Setting MPa{kgf/cm²}	Input Power of Motor for Oil Cooler (W)
NDR081-071	8.0	0.75kW/4P	7	6.9{70}	11.7/14.0	3.4{35}	16/17.6
NDR151-102	14.8	1.5 kW/4P	10		20.8/25.0		
NDR151-103		2.2 kW/4P				6.9{70}	
NDR231-203	24.4		20		35.0/42.0	3.4{35}	35.5/39.1
NDR231-305		3.7 kW/4P	30			6.9{70}	
NDR381-305	37.7				53.5/64.0	3.4{35}	

Power Source…AC ø3 200/200/220V-50/60/60Hz Power Source for Oil Cooler Fan,AC ø1 200/200/220V-50/60/60Hz

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UR / 11.95
Printed in Japan 04/99-002

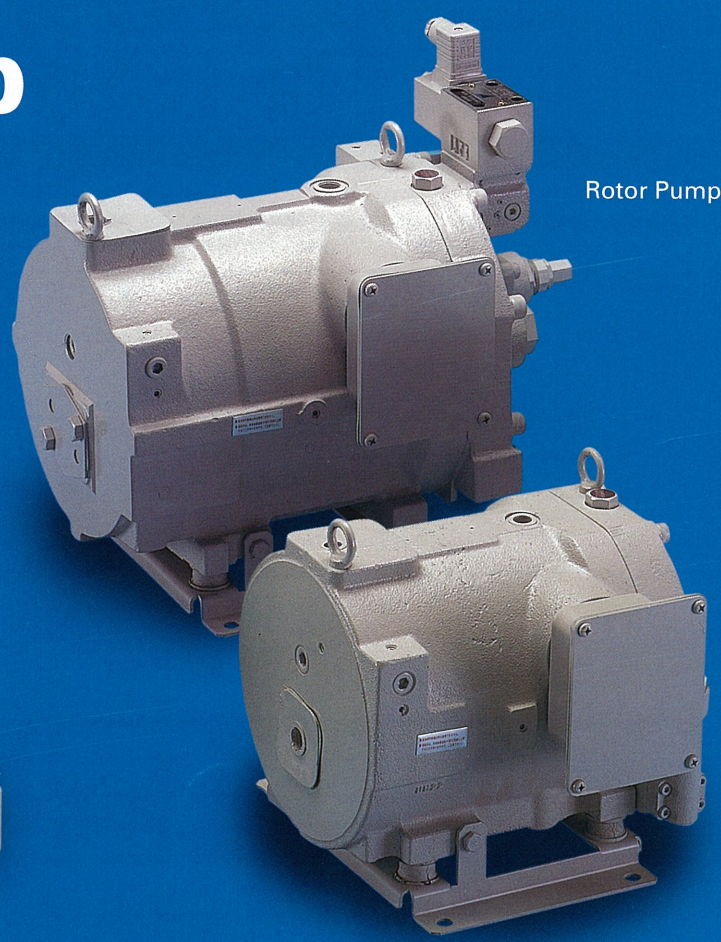
DAIKIN

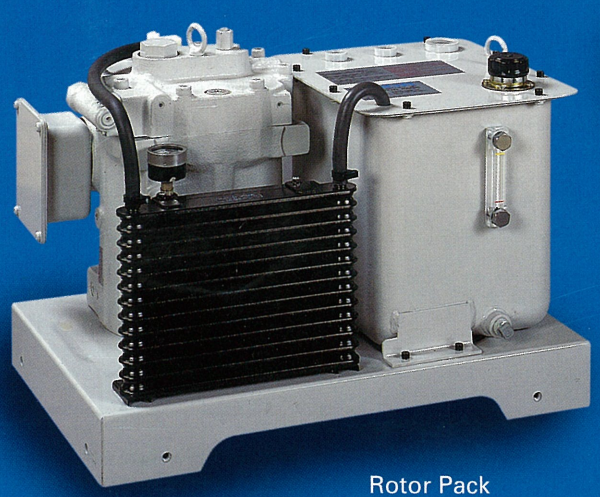
First in its class!!

Powerful Compact Quiet

Rotor Pump -RP series-

Rotor Pack -NDR series-

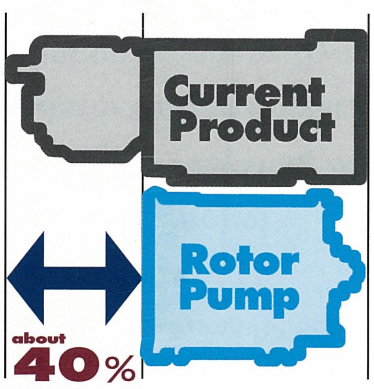

Rotor Pump


Rotor Pack

Feature

Variable displacement pump integrated in electric motor

The construction was developed for the use in machine tools.
The special advantages of this design compared to conventional pump/motor unit are:
- **reduced installation expenditure, no coupling and mounting bracket**
- **reduced installation space (to 40%)**



- **smaller oil tank**
- **lower weight**
- **no external leakage**
- **lower noise level (−10～−15dB(A))**
- **reduced pulsation. to 50%**
- **lower temperature level**

type of protection IP54 CE

Rotor Pump

Rotor Pump Series Variation and Maximum Operating Pressure

[unit:MPa{kgf/cm²}]

Model	Control Symbol	Motor Output Power (kw) ※2				
		0.75	1.5	2.2	3.7	5.5
RP08 (8.0cm³/rev)	A	6.9(13.7) {70}{140} ※1				
	A-RC					
RP15 (14.8cm³/rev)	A		13.7 {140}	20.6 {210}		
	A-RC					
	CH/CJ		20.6 {210}			
RP23 (24.4cm³/rev)	A			13.7 {140}	20.6 {210}	
	A-RC					
	CH/CJ			20.6 {210}		
RP38 (37.7cm³/rev)	A				13.7 {140}	20.6 {210}
	A-RC					
	CH/CJ				20.6 {210}	

※1) Pressure setting 13.7MPa can be applied in limited condition. So consult Daikin in this case.
※2) Power Source ● Standard···200v-50Hz, 200/220v-60Hz ●Option 1···230v-50Hz ●Option 2···380/400/415v-50Hz, 400/440/460v-60Hz

Nomenclature

RP 15 A 2 - 15 Y - 30
1 2 3 4 5 6 7 (Typical model)

1 Basic Model Number
RP : Rotor Pump RP Series

2 Pump Size

3 Control Symbol

4 Pressure Adjusting Range

5 Motor Output Power

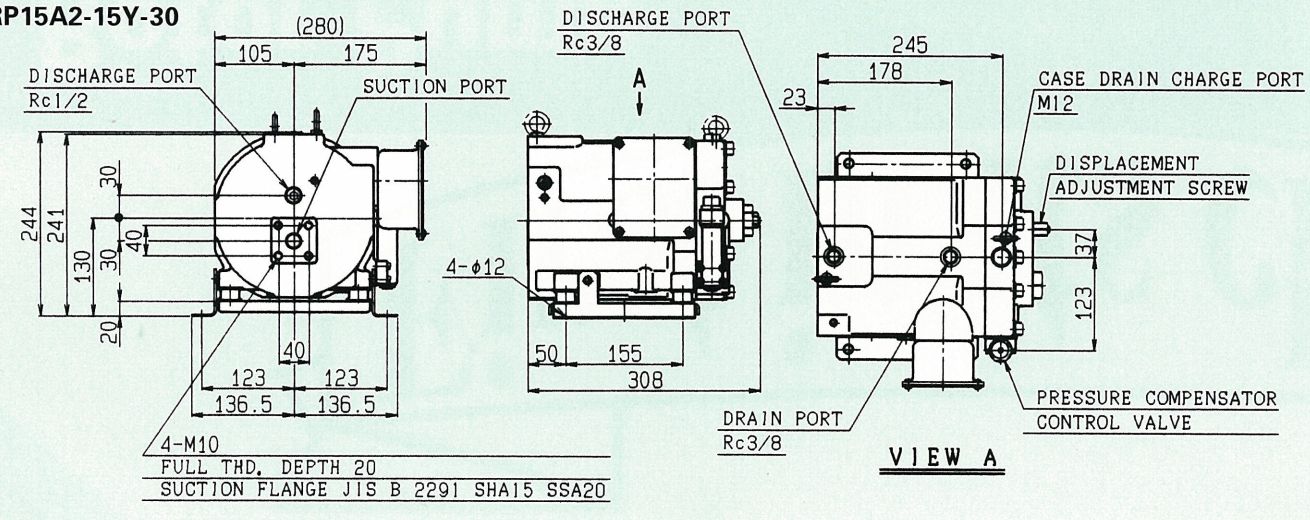
6 Optional Voltage Symbol
None : Standard

7 Design Number

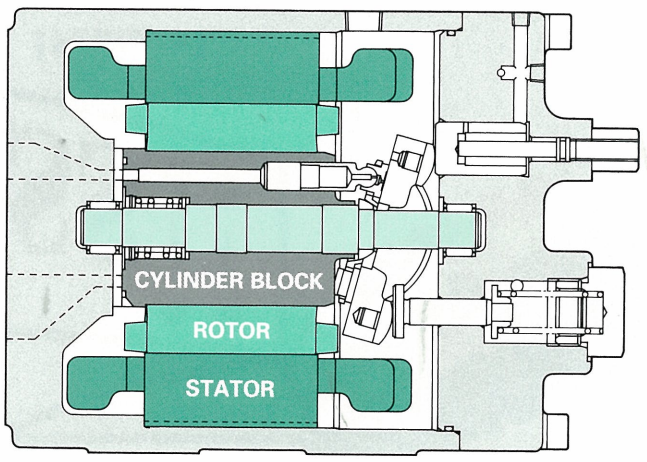
※ In case of other variations, please consult Daikin.

Dimensions

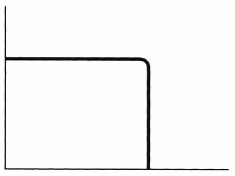
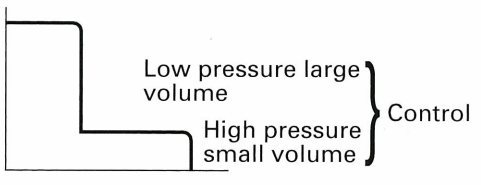
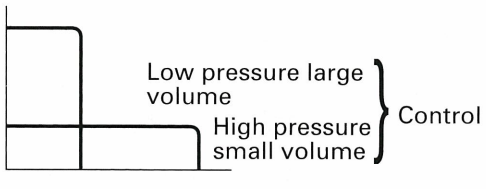
RP15A2-15Y-30



Sectional Drawing



Kinds of controlling systems

Controlling systems		Symbols	Characteristics	Features and applications	
Pressure compensator control		A		●Sharp cut-off characteristic ●Pressure and flow rate can be controlled freely. ●3 kinds of pressure adjusting range are available by the compensator-spring.	
Remote pressure compensator control		A-RC		●Sharp cut-off characteristic ●Pressure can be adjusted remotely. ●Pressure adjusting range is determined by the remote control relief valve.	
Combination control (two pressure and two flow controls by a single pump)	2 flow-2 pressure p.c. by system	CH		●A single pump is capable of performing the works of two pumps:i. e. two pressure and two volume controls. ●Most suitable for"Quick"and "Slow" shifting of the actuator. ●Most effective for power conservation and limiting oil temperature rise. ●Pressure and flow rate can be controlled freely.	●When actuator pressure increase or decrease,the pump displacement is automatically changed which makes it possible to shift the actuator slowly or quickly. ●When machining starts, actuator speed is changed from high to low.
	2 flow-2 pressure p.c. by solenoid operated valve	CJ			●The actuator can be shifted slowly or quickly by on/off operation of the solenoid operated valve with limit switch or a similar product. ●Ideally used when machining is required to start immediately after the actuator speed is changed from high to low speed.