

## **UVN** Series

Variable Volume Vane Uni-Pump







#### Motor Selection Method

The available range in the the rated output of each motor is shown below the output curve of each motor in the graph.

#### (Example)

Find the motor to be used at a pressure of 3.5MPa (507psi) discharge rate of 3.2gpm and frequency of 60Hz.

#### (Solution)

As illustrated by the broken line in the graph, you are looking for the motor located above the crossing port between the pressure of 3.5MPa (507psi) and discharge rate of 3.2gpm.

## The New Uni-Pump All-in-One Pump and Motor

Get all of the power and almost none of the noise with our new Uni-Pump integrated variable vane pump and motor. Featuring our original pump and electromotor shaft connection, the Uni-Pump produces limited noise.

This compact, all-in-one type even consumes 40% less energy than standard models. Pump capacities up to 7.6gpm with 1160psi. Low heat generation results in a longer operation life.

### **Specifications**

	Vane pu		and the second		
Model	Delivery gpm at no load	Pressure Adjustment Range psi	- Motor size AC230V	Weight Ibs.	
UVN-1A-0A2-0.7E-4M-11		219~562	1HPX4p	41.9	
UVN-1A-0A2-1.5E-4M-11		219~562	2HPX4p	48.5	
UVN-1A-0A3-0.7E-4M-11	3.8	510~872	1HPX4p	41.9	
UVN-1A-0A3-1.5E-4M-11	3.0	510~872	2HPX4p	48.5	
UVN-1A-0A4-0.7E-4M-11		802~1165	1HPX4p	41.9	
UVN-1A-0A4-1.5E-4M-11		802~1165	2HPX4p	48.5	
UVN-1A-1A2-1.5E-4M-11		210 502	2HPX4p	48.5	
UVN-1A-1A2-2.2E-4M-11		219~582	3HPX4p	58.4	
UVN-1A-1A3-1.5E-4M-11	7.6	F10 072	2HPX4p	48.5	
UVN-1A-1A3-2.2E-4M-11	7.0	510~872	3HPX4p	68.4	
UVN-1A-1A4-1.5E-4M-11		000 11/5	2HPX4p	48.5	
UVN-1A-1A4-2.2E-4M-11		802~1165	3HPX4p	68.4	

## Model Code



#### **Dimensional Drawings**



Model –		Dimensions (Inch)															57.0	
	А	IL	С	KD	Е	F	G	Н	J	L	M	Ν	TXS	R*	KB	0	Р	1
UVN-1A-*A*-0.7E-4M-11	0.79	3.54	3.15	6.18	2.46	1.97	0.09	4.72	2.80	9.06	6.10	4.72	0.59X0.39	0.20	4.33	2.56	5.12	3.62
UVN-1A-*A*-1.5E-4M-11	0.79	3.94	3.54	6.89	2.76	2.46	0.13	5.04	3.07	10.04	6.69	5.91	0.59X0.39	0.20	4.72	2.56	5.12	3.94
UVN-1A-*A*-2.2E-4M-11	0.79	4.33	3.94	7.68	3.15	2.76	0.13	5.43	3.46	11.22	7.87	6.50	0.67X0.47	0.24	5.28	2.56	5.31	4.33

Performance Characteristics - When being used as NSP power unit with radiator

## **Power Consumption**

Oil temperature rise (room temperature difference)(°F) 86

68

50

32

0

1



## **Oil Temperature Characteristics**

Tank capacity 2.6 Gallons

FC pressure

FC pres

3

2

Time (Hr)

Type : NSP-

5.0MPa {724ps

4

3.5MPa {

\*V1A\*-12

86

68

50

32

0

1

Oil temperature rise (room temperature difference)(°F)

## Noise Characteristics



Tank capacity 5.3 Gallons

FC pressur

FC pressure

FC pressure

3

2

Time (Hr)

7.0MPa {10

5.0MPa {72

3.5MPa (507p

4

#### Conditions

The value in the left-hand drawing represents typical characteristics under the following conditions: Oil used: ISO VG32 or its equivalent Oil temperature: 104 +/- 41°F Measuring distance: 3.3 feet around the unit Note: The noise characteristics depend on the installation floor base conditions and the

presence of the surrounding substance reflecting the sound, and so may be different from the above description in some cases.

#### Conditions

The value on the left-hand drawing represents typical characteristics under the following conditions: Oil used: ISO VG32 or its equivalent Speed: 1800 min<sup>-1</sup> Room temperature: 84°F

Motor: 0.75~2.2kW

- Notes:
- 1. For 5.0MPa (724psi) of a 2.6 gallon tank. It should be noted that there is a big rise in oil temperature under continuous operation. In this case, we recommend use of a 5.3 gallon tank.
- Rise of oil temperature depends on the conditions of using an actual machine, and so may be different from the above description in some cases.

# NACHI

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