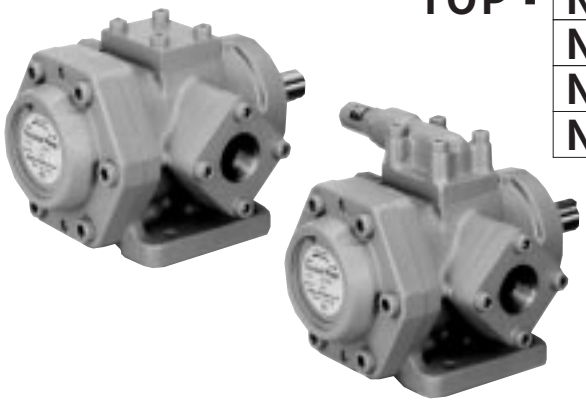
TOP-N3H

Specifications

Model \ Item	Theoretical Displacement cm^3/rev	Theoretical Discharge ℓ/min		Max. Discharge Pressure MPa	Max. Revolution min^{-1}	Approx. Weight kg
		1500min^{-1}	1800min^{-1}			
TOP-N320H	26	39.0	46.8	4.0	1800	14.8 (15.4)
TOP-N330H	39	58.5	70.2	※4.0	1800	14.9 (15.5)
TOP-N340H	52	78.0	93.6	※3.0	1800	14.9 (15.5)
TOP-N350H	65	97.5	117.0	※2.0	1800	15.6 (16.2)

○The above maximum discharge and maximum revolution values are for when using ISO-VG46 oil with an oil temperature of 40 ℃.
○The approximate weight values shown in the brackets ( ) are for when a relief valve is attached.
*Please consult with your Nippon Oil Pump representative before using the specifications marked with "※".

Model



TOP - N320H / N330H / N340H / N350H

Rotation Direction [ ] Relief Valve [ ] - [ ] Special Symbol — Relief Valve Set Pressure

Special Symbol: UT, VF, VH (Refer to page 63.)

Relief Valve:
No mark: Without relief valve
VB: With relief valve
○Refer to page 57 for the relief valve set pressure, and indicate the desired type when placing your order. Indicate the set pressure (to the first decimal point) at the end of the model number (Ex.: 0.1MPa).

Rotation Direction:
No mark: Clockwise rotation as seen from the end of the shaft (standard rotation direction)
L: Counter-clockwise rotation as seen from the end of the shaft

*When using the UT seal materials the configuration of the pumps will be different than those shown on page 40. The appropriate diagrams can be obtained from the Nippon Oil Pump homepage.

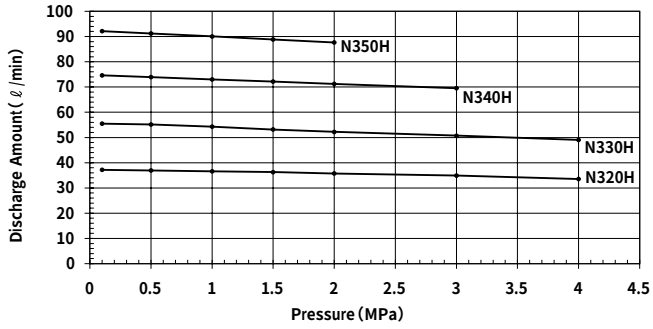
Model Examples:
TOP-N320HVB (with relief valve)
TOP-N330HL (counter-clockwise rotation as seen from end of shaft)

Performance Table

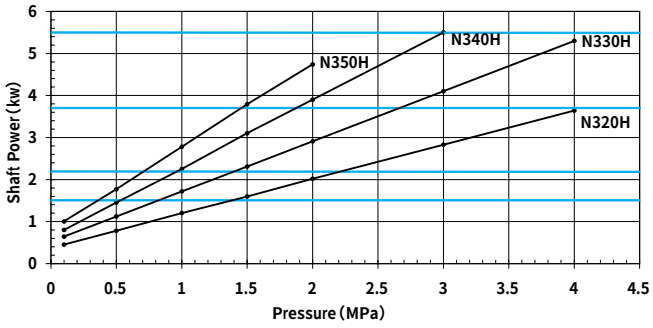
Test Conditions Oil: ISO-VG46 with a temperature of 40 ℃

At 1,450 Rotations

●Flow Rate Characteristics

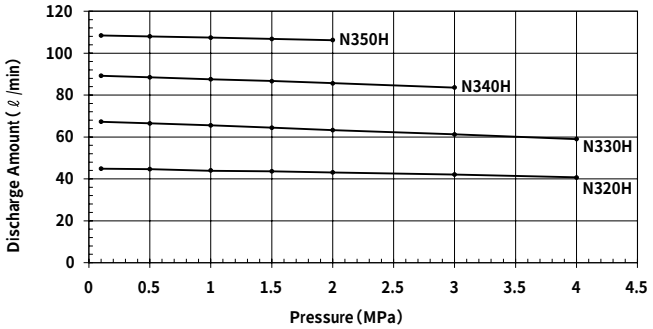


●Required Power

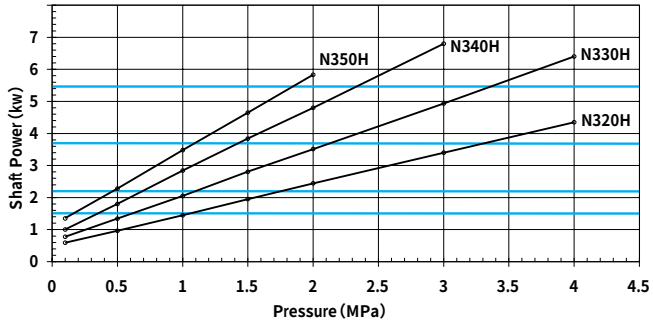


At 1,750 Rotations

●Flow Rate Characteristics



●Required Power

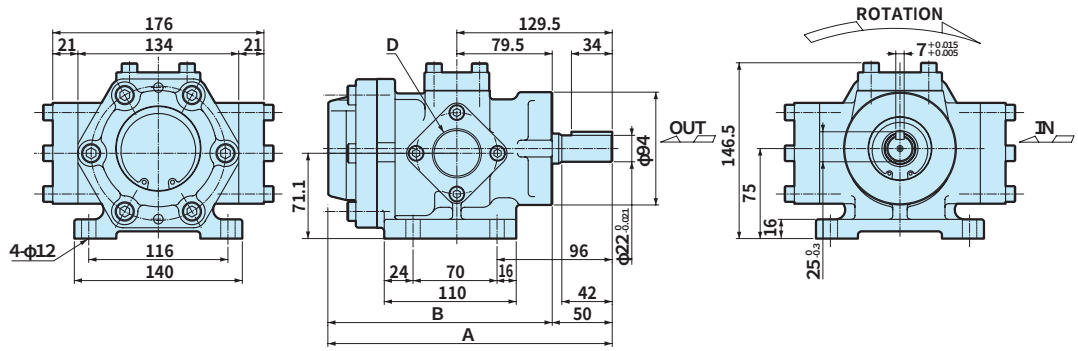


○Select the best motor using the lines in the "Required Power" table as the applicable standards.

Dimensional Diagrams

○Be sure to check the Nippon Oil Pump homepage for the most up-to-date diagrams and dimensions.

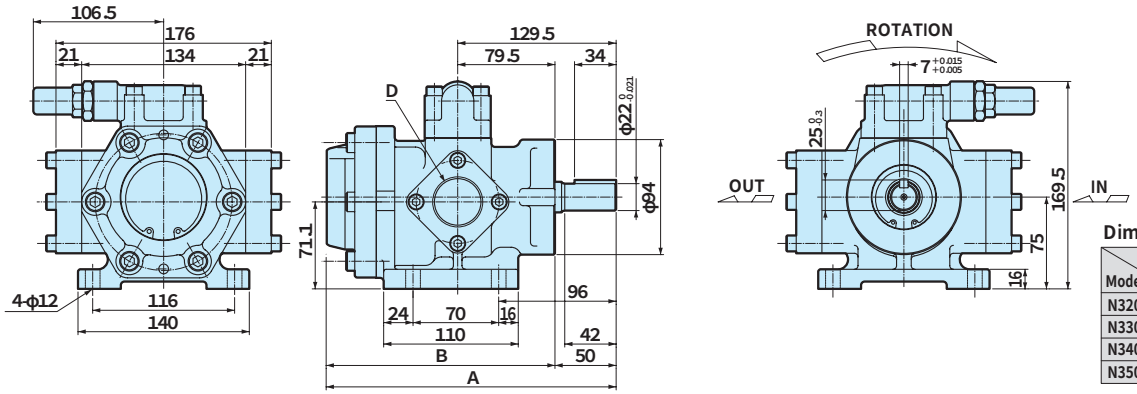
Model : TOP - N3H



Dimensions

Item / Model	A	B	D (port diameter) In	D (port diameter) Out
N320H	237	187	Rc1	Rc1
N330H	237	187	Rc1 1/4	
N340H	237	187		
N350H	247	197		

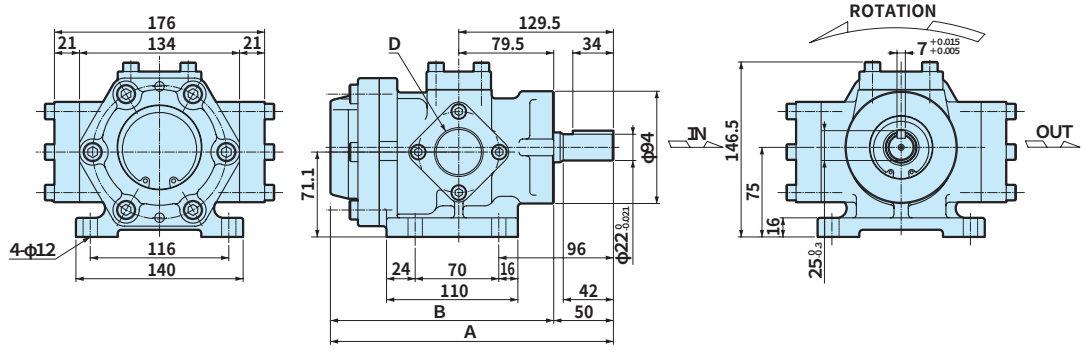
Model : TOP - N3HVB



Dimensions

Item / Model	A	B	D (port diameter) In	D (port diameter) Out
N320HVB	237	187	Rc1	Rc1
N330HVB	237	187	Rc1 1/4	
N340HVB	237	187		
N350HVB	247	197		

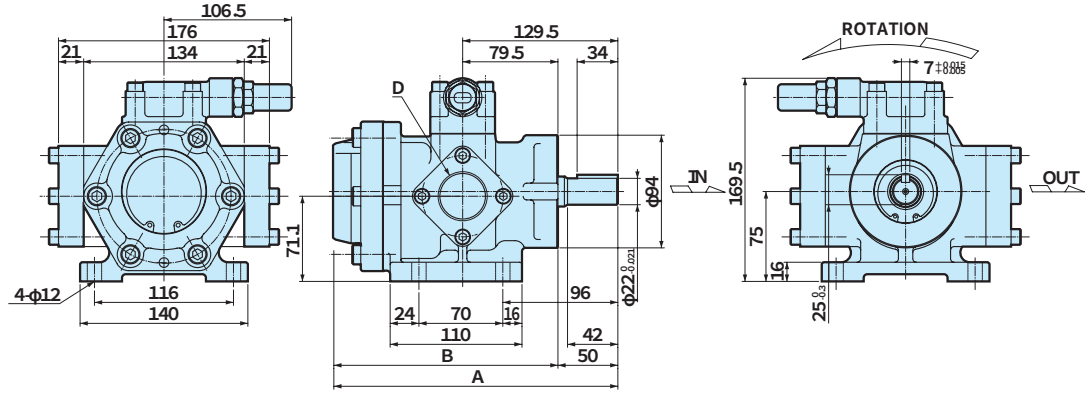
Model : TOP - N3HL



Dimensions

Item / Model	A	B	D (port diameter) In	D (port diameter) Out
N320HL	237	187	Rc1	Rc1
N330HL	237	187	Rc1 1/4	
N340HL	237	187		
N350HL	247	197		

Model : TOP - N3HLVB



Dimensions

Item / Model	A	B	D (port diameter) In	D (port diameter) Out
N320HLVB	237	187	Rc1	Rc1
N330HLVB	237	187	Rc1 1/4	
N340HLVB	237	187		
N350HLVB	247	197		

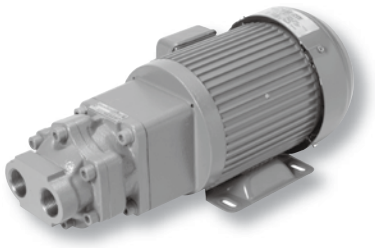
3MF (WITH INTEGRATED 3-PHASE MOTOR)

Model TOP-3MF▲▲▲▲ - N3▲▲ FA / FB (VB)

▲▲▲▲: Motor size

FA / FB: Valve option

FA	Discharge port parallel to pump shaft
FB	Discharge port perpendicular to pump shaft



■ SPECIFICATION

Model \ Item	Motor speed 50Hz 1500min^{-1}				Motor speed 60Hz 1800min^{-1}			
	Theoretical discharge (ℓ/min)	Max. pressure for motor output (MPa)			Theoretical discharge (ℓ/min)	Max. pressure for motor output (MPa)		
		750W	1500W	2200W		750W	1500W	2200W
TOP-N320 FA / FA VB / FB	39.0	0.4	1.3	2.1	46.8	0.2	1.0	1.7
TOP-N330 FA / FA VB / FB	58.5	0.1	0.8	1.3	70.2	—	0.6	1.0
TOP-N340 FA / FA VB / FB	78.0	—	0.5	0.9	93.6*	—	0.3	0.6

Note: The value"*" can not always be achieved as it is subject to operating conditions and specifications.
TOP-N3F is the updated series of TOP-3F. It is also compatible with old series in performance and mounting dimensions.

■ MOTOR SPECIFICATION

·3-phase squirrel-cage induction motor, Totally enclosed, Class F insulation, IE3.
CE-marking, Protection level IP44, 200VAC 50/60Hz, 220VAC 60Hz, 4 poles with continuous rating at 750, 1500, 2200W
·Please consult us when ordering outdoor-type, increased safety-type, motor other than for standard voltage, one with terminal box attched on the other side, or other special motor.

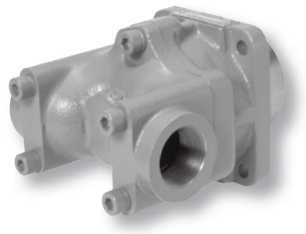
N3F (PUMPHEAD)

Model TOP-N3▲▲ FA / FB [/ M] (VB)

FA / FB: Valve option

FA	Discharge port parallel to pump shaft
FB	Discharge port perpendicular to pump shaft

Non	For mounted on 3MF motor
M	For using other pump driving forces



■ SPECIFICATION

Model \ Item	Theoretical displacement (cm^3/rev)	Theoretical discharge (ℓ/min)		Max. pressure (MPa)	Max. revolution (min^{-1})	Approx. Weight (Kg)
		1500min^{-1}	1800min^{-1}			
TOP-N320 FAM	26	39.0	46.8	2.5	1800	8.0
TOP-N320 FAMVB						10.5
TOP-N320 FBM						9.0
TOP-N330 FAM	39	58.5	70.2	2.5*	1800	8.0
TOP-N330 FAMVB						10.5
TOP-N330 FBM						9.0
TOP-N340 FAM	52	78.0	93.6*	2.0*	1800*	8.0
TOP-N340 FAMVB						10.5
TOP-N340 FBM						9.0

Note: The value"*" can not always be achieved as it is subject to individual operating conditions and specifications.
TOP-N3F is the updated series of TOP-3F. It is also compatible with the old series in performance and mounting dimensions.
N3FAM and N3FBM can not be coupled with 3MF motor.

3MB-N3H (BASE-COUPLING MOUNT TYPE)
N3H (PUMPHEAD)

Model TOP-3MB M / T ▲▲▲▲ - N3▲▲H (VB)

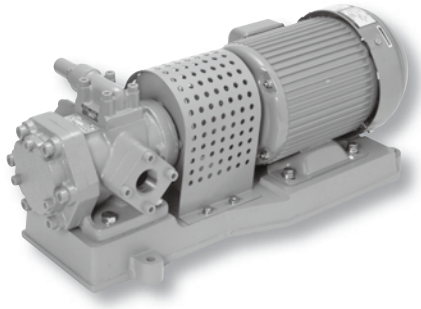
▲▲▲▲: Motor size

(VB): Valve option

M	Mitsubishi Motor
T	Toshiba Motor

TOP-N3▲▲H (VB)

(VB): Valve option



■ SPECIFICATION

Model \ Item	Theoretical displacement (cm^3/rev)	Theoretical discharge (ℓ/min)		Max. pressure (MPa)	Max. revolution (min^{-1})	Approx. Weight (Kg)
		1500min^{-1}	1800min^{-1}			
TOP-N320H	26.0	39.0	46.8	4.0	1800	14.8 (15.4)
TOP-N330H	39.0	58.5	70.2	4.0*	1800	14.9 (15.5)
TOP-N340H	52.0	78.0	93.6	3.0*	1800	14.9 (15.5)
TOP-N350H	65.0	97.5	117.0	2.0*	1800	15.6 (16.2)

Note: The value"*" can not always be achieved as it is subject to individual operating conditions and specifications.
Values in ( ) show approx. weights of the pump when the valve is attached.
TOP-N3H is the updated series of TOP-3H. It is compatible with the old series in performance and mounting dimensions.

■ MOTOR SPECIFICATION

·Compatible motor: 1500, 2200, 3700, 5500W.

3MB-3V (BASE-COUPLING MOUNT TYPE)
3V (PUMPHEAD)

Model TOP-3MB [M/T] ▲▲▲▲-3▲▲V (VB)

- [M/T]: M = Mitsubishi Motor, T = Toshiba Motor
- ▲▲▲▲: Motor size
- (VB): Valve option

TOP-3▲▲V (VB)

- (VB): Valve option

■ SPECIFICATION (For High Viscosity Oil)

Item / Model	Theoretical displacement (cm^3/rev)	Theoretical discharge (ℓ/min) 1500min^{-1}	Theoretical discharge (ℓ/min) 1800min^{-1}	Max. pressure (MPa)	Max. revolution (min^{-1})	Approx. Weight (Kg)
TOP-330V	39.0	58.5	70.2	1.0	1800	19.3 (20.7)
TOP-340V	52.0	78.0	93.6	1.0	1800	19.5 (20.9)
TOP-350V	65.0	97.5	117.0	1.0	1800	19.3 (20.7)

Note: For delivering oil with high viscosity (46-2000mm^2/sec), such as high viscosity lubricant oil or gear oil.
Values in ( ) show approx. weights of the pump when the valve is attached.

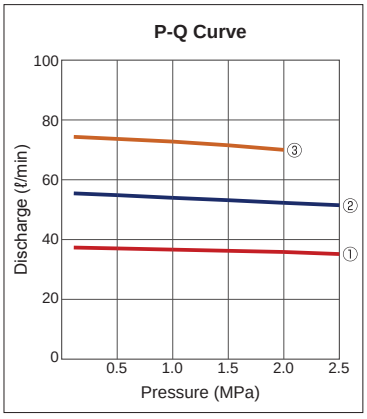
■ MOTOR SPECIFICATION

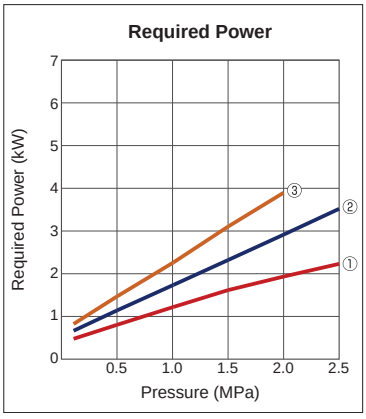
·Compatible motor: 2200, 3700, 5500W.

■ N3F Performance Curve

1450 min^{-1}

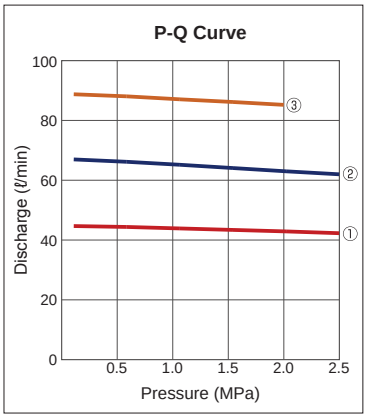
①N320F ②N330F
③N340F

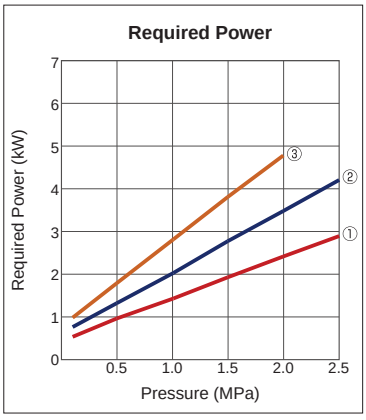




1750 min^{-1}

①N320F ②N330F
③N340F

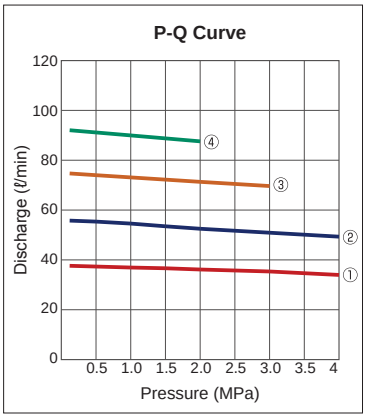


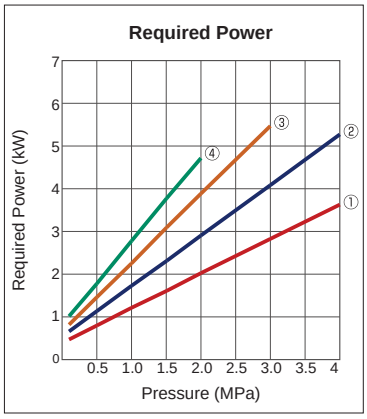


■N3H Performance Curve

1450 min^{-1}

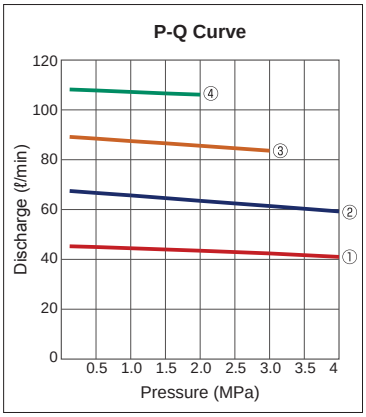
①N320H ②N330H
③N340H ④N350H

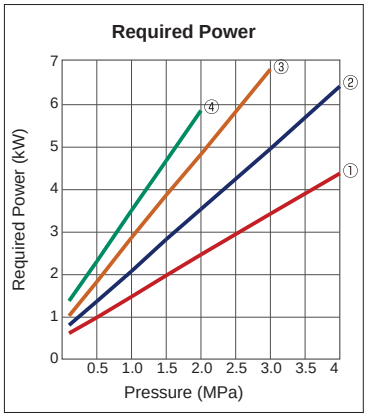




1750 min^{-1}

①N320H ②N330H
③N340H ④N350H

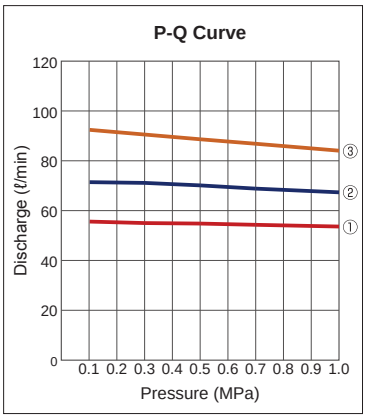


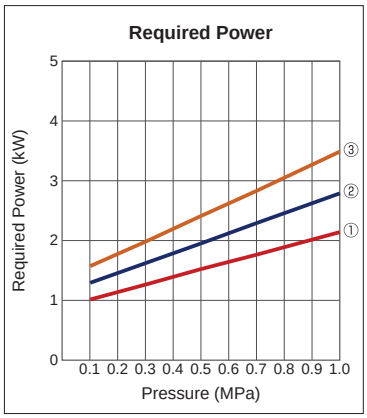


■3V Performance Curve

1450 min^{-1}

①330V ②340V
③350V





1750 min^{-1}

①330V ②340V
③350V