

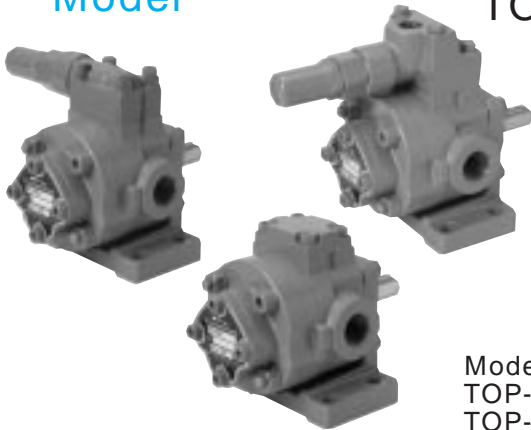
TOP-2HB

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-203HB		2.8	4.2	5.0	3.0	3000	3.5 (3.9)
TOP-204HB		4	6.0	7.2	3.0	3000	3.6 (4)
TOP-206HB		6	9.0	10.8	2.5	2500	3.8 (4.2)
TOP-208HB		8	12.0	14.4	2.5	2500	4 (4.4)
TOP-210HB		10	15.0	18.0	2.5	2500	4.1 (4.6)
TOP-212HB		12	18.0	21.6	2.0	2000	4.3 (4.7)
TOP-216HB		16	24.0	28.8	1.5	1800	4.6 (5.1)
TOP-220HB		20	30.0	36.0	1.2	1800	5 (5.5)

The above maximum discharge and maximum revolution values are for when using ISO-VG46 oil with an oil temperature of 40 °C.
The approximate weight values shown in the brackets () are for when a relief valve is attached.

Model



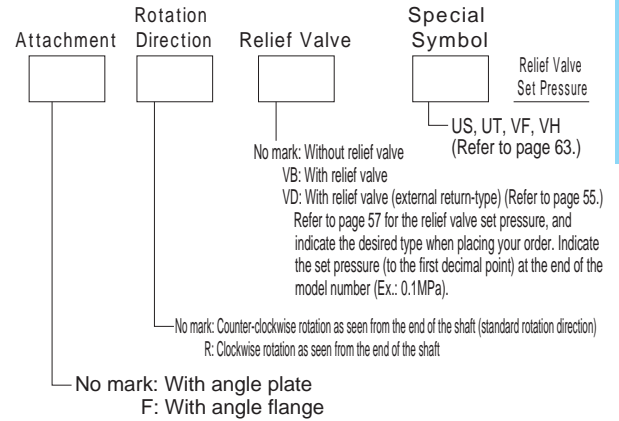
TOP -

203HB
204HB
206HB
208HB
210HB
212HB
216HB
220HB

Model Examples:

TOP-203HBVB (with relief valve)

TOP-204HBFR (with angle flange, clockwise rotation as seen from the end of the shaft)



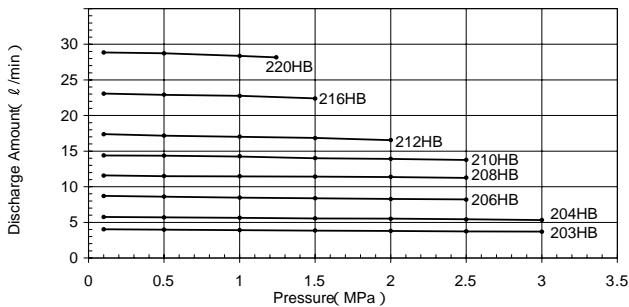
2HB

Performance Table

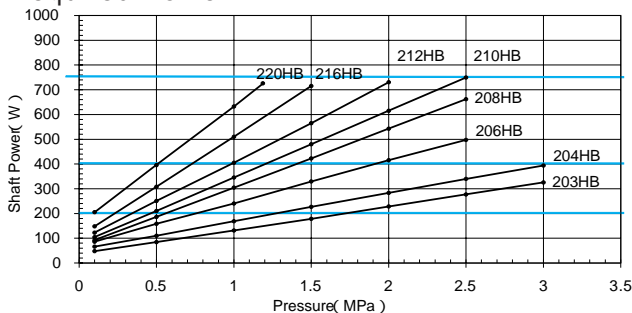
Test Conditions Oil: ISO-VG46 with a temperature of 40 °C

At 1,450 Rotations

Flow Rate Characteristics

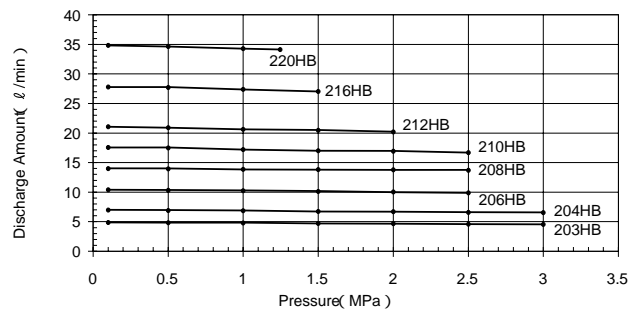


Required Power

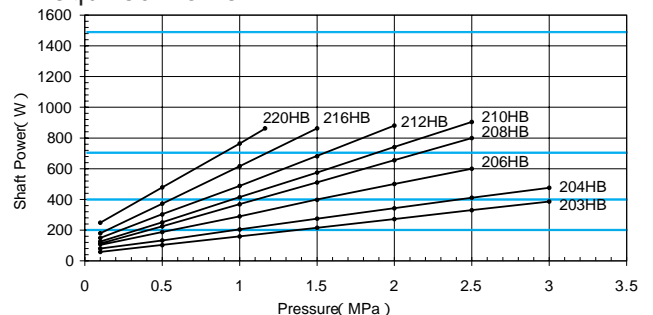


At 1,750 Rotations

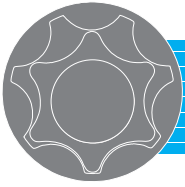
Flow Rate Characteristics



Required Power



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

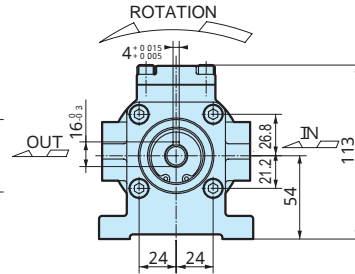
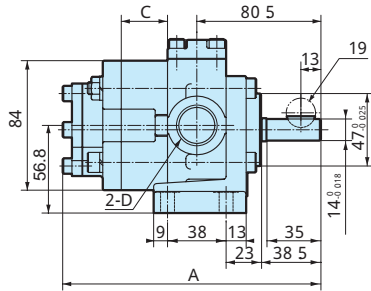
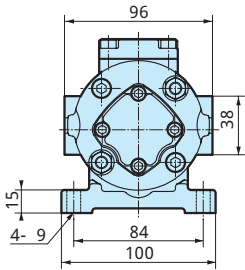


TOP-2HB

Dimensional Diagrams

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

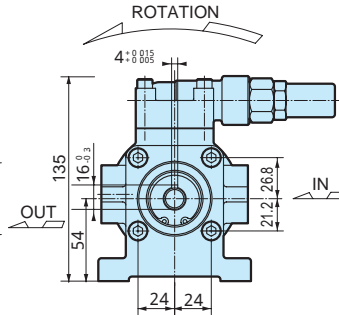
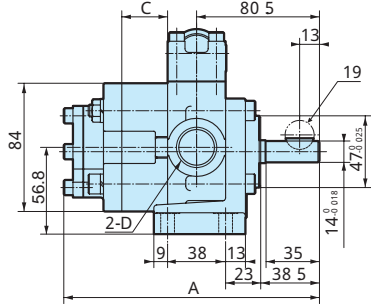
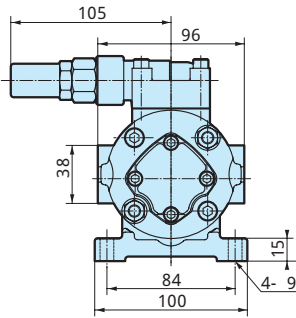
Model : TOP - 2HB



Dimensions

Model	Item	A	C	D
203HB		144.5	7	Rc ^{1/2}
204HB		147.5	10	
206HB		152.5	15	
208HB		157.5	20	
210HB		162.5	25	Rc ^{3/4}
212HB		167.5	30	
216HB		177.5	40	
220HB		187.5	50	

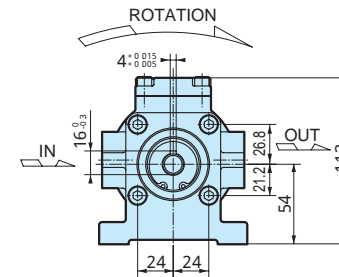
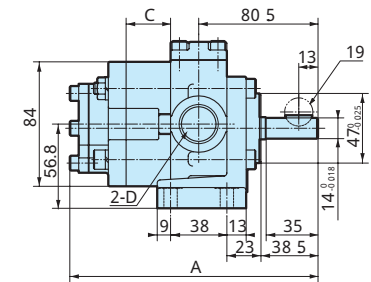
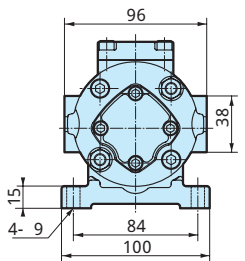
Model : TOP - 2HBVB



Dimensions

Model	Item	A	C	D
203HBVB		144.5	7	Rc ^{1/2}
204HBVB		147.5	10	
206HBVB		152.5	15	
208HBVB		157.5	20	
210HBVB		162.5	25	Rc ^{3/4}
212HBVB		167.5	30	
216HBVB		177.5	40	
220HBVB		187.5	50	

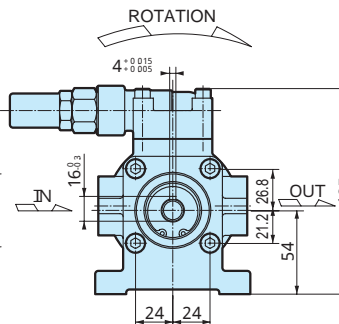
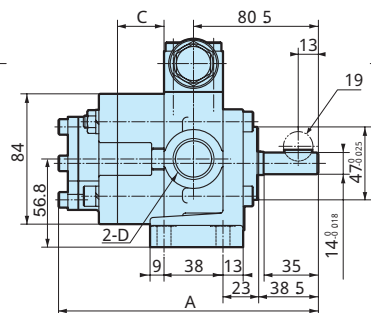
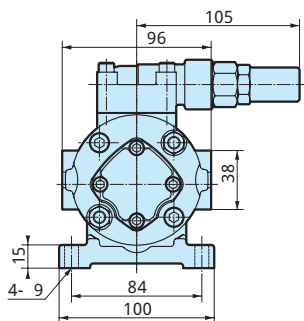
Model : TOP - 2HBR



Dimensions

Model	Item	A	C	D
203HBR		144.5	7	Rc ^{1/2}
204HBR		147.5	10	
206HBR		152.5	15	
208HBR		157.5	20	
210HBR		162.5	25	Rc ^{3/4}
212HBR		167.5	30	
216HBR		177.5	40	
220HBR		187.5	50	

Model : TOP - 2HBRVB



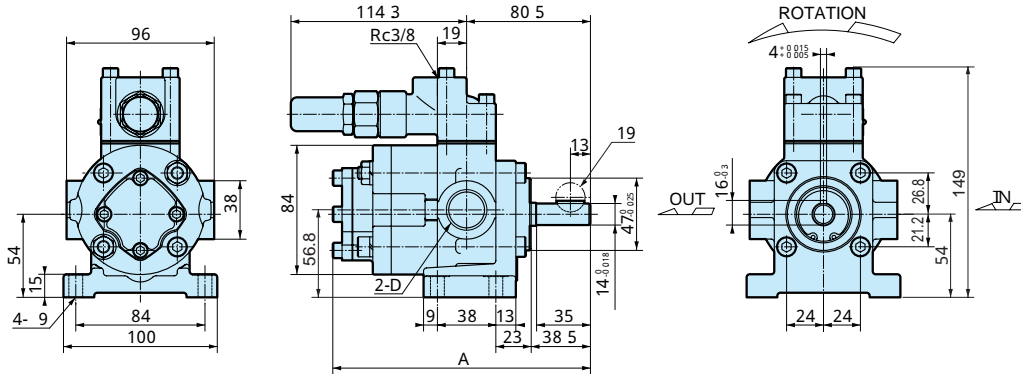
Dimensions

Model	Item	A	C	D
203HBRVB		144.5	7	Rc ^{1/2}
204HBRVB		147.5	10	
206HBRVB		152.5	15	
208HBRVB		157.5	20	
210HBRVB		162.5	25	Rc ^{3/4}
212HBRVB		167.5	30	
216HBRVB		177.5	40	
220HBRVB		187.5	50	

Dimensional Diagrams

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

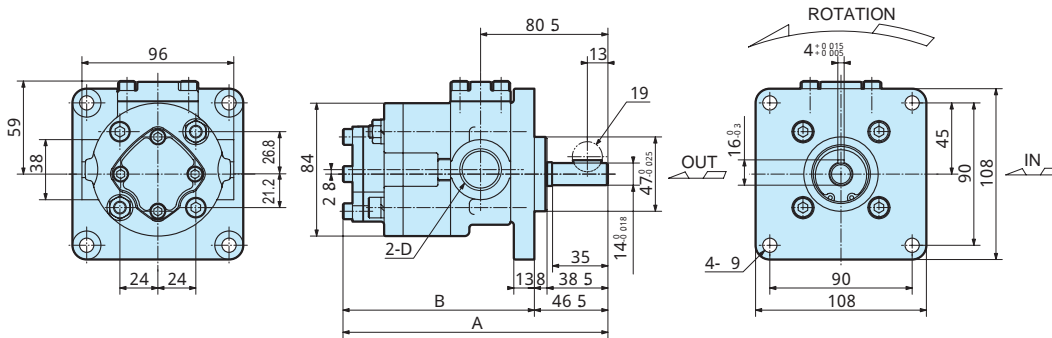
Model : TOP - 2HBVD



Dimensions

Model	Item	A	C	D
203HBVD		144.5	7	Rc ^{1/2}
204HBVD		147.5	10	
206HBVD		152.5	15	
208HBVD		157.5	20	
210HBVD		162.5	25	Rc ^{3/4}
212HBVD		167.5	30	
216HBVD		177.5	40	
220HBVD		187.5	50	

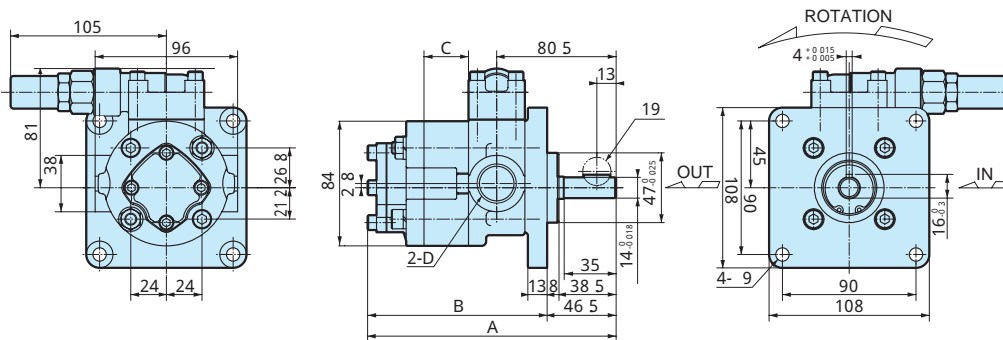
Model : TOP - 2HBF



Dimensions

Model	Item	A	B	C	D
203HBF		144.5	98	7	Rc ^{1/2}
204HBF		147.5	101	10	
206HBF		152.5	106	15	
208HBF		157.5	111	20	
210HBF		162.5	116	25	Rc ^{3/4}
212HBF		167.5	121	30	
216HBF		177.5	131	40	
220HBF		187.5	141	50	

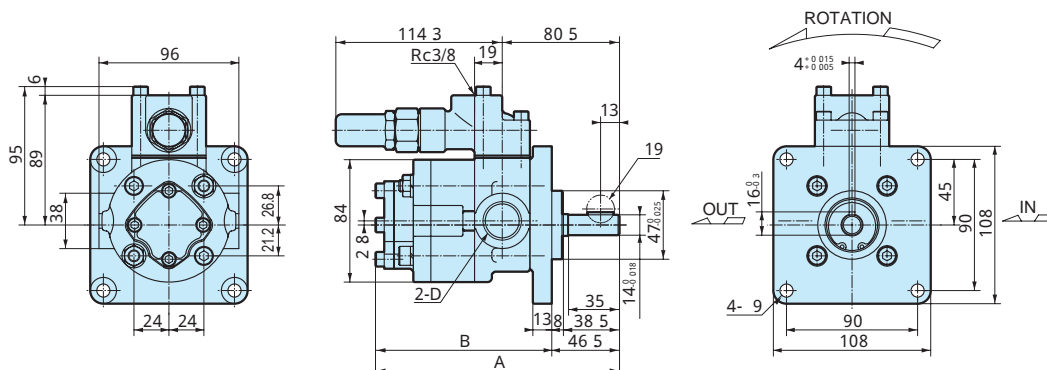
Model : TOP - 2HBFVB



Dimensions

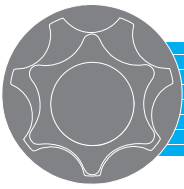
Model	Item	A	B	C	D
203HBFVB		144.5	98	7	Rc ^{1/2}
204HBFVB		147.5	101	10	
206HBFVB		152.5	106	15	
208HBFVB		157.5	111	20	
210HBFVB		162.5	116	25	Rc ^{3/4}
212HBFVB		167.5	121	30	
216HBFVB		177.5	131	40	
220HBFVB		187.5	141	50	

Model : TOP - 2HBFVD



Dimensions

Model	Item	A	B	C	D
203HBFVB		144.5	98	7	Rc ^{1/2}
204HBFVB		147.5	101	10	
206HBFVB		152.5	106	15	
208HBFVB		157.5	111	20	
210HBFVB		162.5	116	25	Rc ^{3/4}
212HBFVB		167.5	121	30	
216HBFVB		177.5	131	40	
220HBFVB		187.5	141	50	



TOP-2MY

Specifications

Model	Item	No. of Motor Revolutions 50Hz 1500min ⁻¹				No. of Motor Revolutions 60Hz 1800min ⁻¹					
		Theoretical Discharge ℓ / min	Max. Pressure for Motor Output (MPa)				Theoretical Discharge ℓ / min	Max. Pressure for Motor Output (MPa)			
			200W	400W	750W	1500W		200W	400W	750W	1500W
TOP-203HBM		4.2	1.7	3.0	3.0	3.0	5.0	1.3	3.0	3.0	3.0
TOP-204HBM		6.0	1.2	3.0	3.0	3.0	7.2	0.9	2.3	3.0	3.0
TOP-206HBM		9.0	0.7	1.8	2.5	2.5	10.8	0.5	1.4	2.5	2.5
TOP-208HBM		12.0	0.5	1.3	2.5	2.5	14.4	0.3	1.0	2.3	2.5
TOP-210HBM		15.0	0.4	1.1	2.5	2.5	18.0	0.3	0.9	2.0	2.5
TOP-212HBM		18.0	0.3	0.9	2.0	2.0	21.6		0.7	1.6	2.0
TOP-216HBM		24.0	0.2	0.7	1.5	1.5	28.8		0.5	1.2	1.5
TOP-220HBM		30.0		0.4	1.2	1.2	36.0		0.3	0.9	1.2

The above maximum pressure for motor output values are for when using ISO-VG46 oil with an oil temperature of 40 °C.

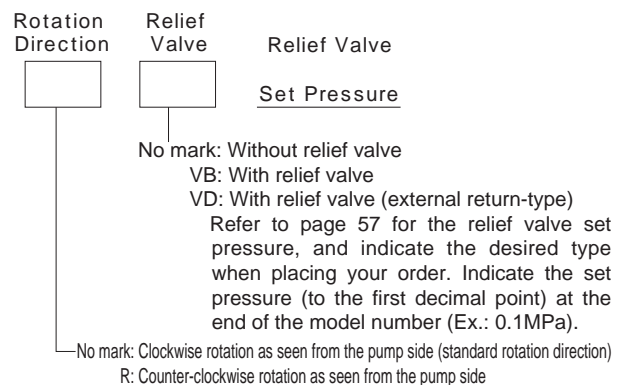
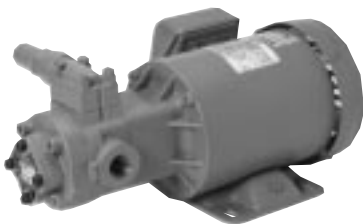
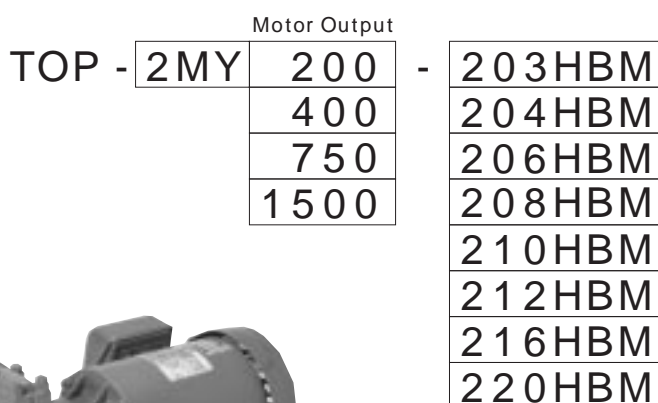
Motor Specifications

Three-Phase Squirrel-Cage Induction Motor Totally enclosed Class E insulation

Output (W)	No. of Poles (P)	Rating	Voltage (V)	Frequency (Hz)	No. of Revolutions (min ⁻¹)	Current (A)	Approx. Weight (kg)
200	4	Continuous	200	50	1440	1.34	7.0
			200	60	1720	1.12	
			220	60	1730	1.17	
400	4	Continuous	200	50	1420	2.2	10.0
			200	60	1710	1.93	
			220	60	1730	1.95	
750	4	Continuous	200	50	1440	3.6	14.0
			200	60	1720	3.3	
			220	60	1740	3.2	
1500	4	Continuous	200	50	1430	6.9	22.0
			200	60	1720	6.2	
			220	60	1730	6.1	

*Please feel free to ask your Nippon Oil Pump representative for more information about special motor specifications such as for outdoor use, explosion-proof, special voltages and reverse box position.

Model



Model Examples

TOP-2MY200-203HBMVB (200W, three-phase, with relief valve)

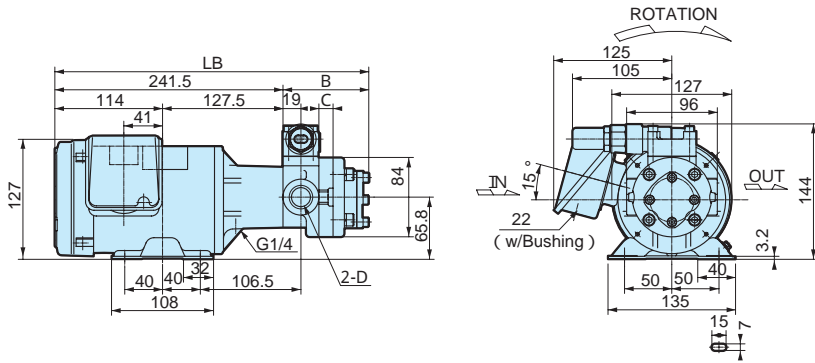
TOP-2MY400-206HBMR (400W, three-phase, counterclockwise rotation as seen from the pump side)

TOP-2MY750-210HBMVD (750W, three-phase, with relief valve <external return type>)

Dimensional Diagrams

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

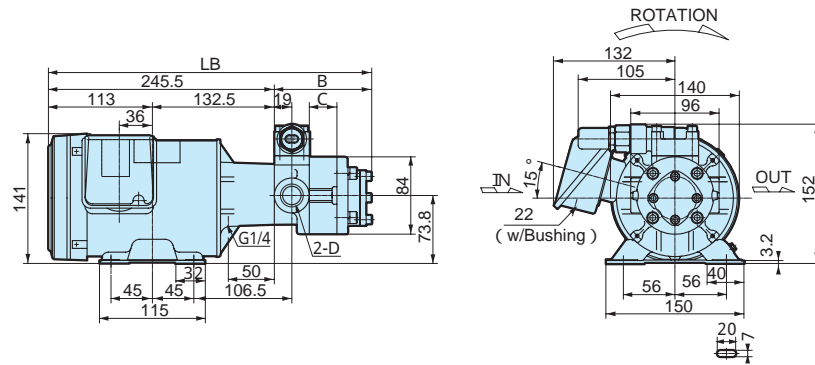
Model : TOP - 2MY200 - 2HBMVB



Dimensions

Model	Item	LB	B	C	D
2MY200-203HBMVB		324.5	83	7	Rc ¹ / ₂
2MY200-204HBMVB		327.5	86	10	
2MY200-206HBMVB		332.5	91	15	
2MY200-208HBMVB		337.5	96	20	Rc ³ / ₄
2MY200-210HBMVB		342.5	101	25	
2MY200-212HBMVB		347.5	106	30	
2MY200-216HBMVB		357.5	116	40	

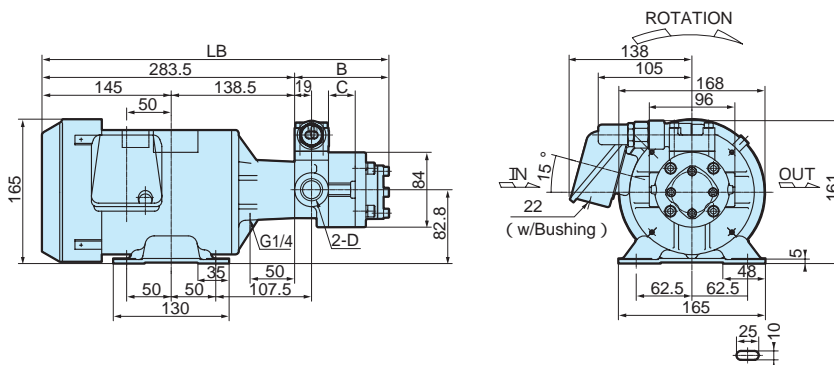
Model : TOP - 2MY400 - 2HBMVB



Dimensions

Model	Item	LB	B	C	D
2MY400-203HBMVB		328.5	83	7	Rc ¹ / ₂
2MY400-204HBMVB		331.5	86	10	
2MY400-206HBMVB		336.5	91	15	
2MY400-208HBMVB		341.5	96	20	Rc ³ / ₄
2MY400-210HBMVB		346.5	101	25	
2MY400-212HBMVB		351.5	106	30	
2MY400-216HBMVB		361.5	116	40	
2MY400-220HBMVB		371.5	126	50	

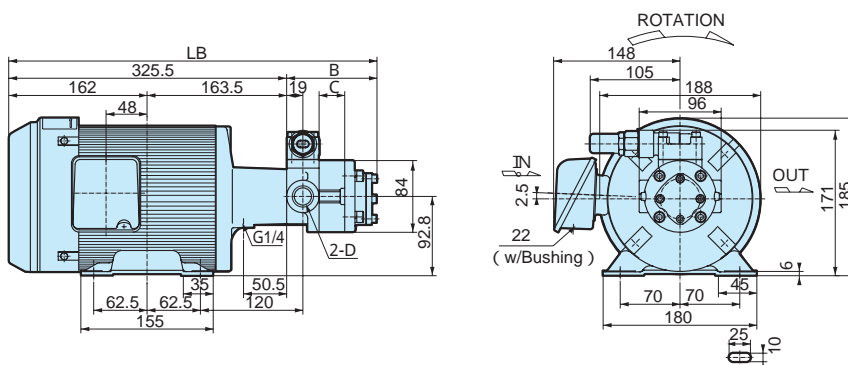
Model : TOP - 2MY750 - 2HBMVB



Dimensions

Model	Item	LB	B	C	D
2MY750-203HBMVB		366.5	83	7	Rc ¹ / ₂
2MY750-204HBMVB		369.5	86	10	
2MY750-206HBMVB		374.5	91	15	
2MY750-208HBMVB		379.5	96	20	Rc ³ / ₄
2MY750-210HBMVB		384.5	101	25	
2MY750-212HBMVB		389.5	106	30	
2MY750-216HBMVB		399.5	116	40	
2MY750-220HBMVB		409.5	126	50	

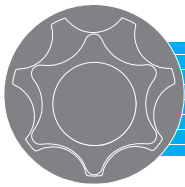
Model : TOP - 2MY1500 - 2HBMVB



Dimensions

Model	Item	LB	B	C	D
2MY1500-203HBMVB		408.5	83	7	Rc ¹ / ₂
2MY1500-204HBMVB		411.5	86	10	
2MY1500-206HBMVB		416.5	91	15	
2MY1500-208HBMVB		421.5	96	20	Rc ³ / ₄
2MY1500-210HBMVB		426.5	101	25	
2MY1500-212HBMVB		431.5	106	30	
2MY1500-216HBMVB		441.5	116	40	
2MY1500-220HBMVB		451.5	126	50	

2HB



TOP-2ME S (Single-Phase Motor)

Specifications

Model	Item	No. of Motor Revolutions 50Hz 1500min ⁻¹			No. of Motor Revolutions 60Hz 1800min ⁻¹				
		Theoretical Discharge ℓ / min	Max. Pressure for Motor Output (MPa)			Theoretical Discharge ℓ / min	Max. Pressure for Motor Output (MPa)		
			200W	400W	750W		200W	400W	750W
TOP-203HBM		4.2	1.7	3.0	3.0	5.0	1.3	3.0	3.0
TOP-204HBM		6.0	1.2	3.0	3.0	7.2	0.9	2.3	3.0
TOP-206HBM		9.0	0.7	1.8	2.5	10.8	0.5	1.4	2.5
TOP-208HBM		12.0	0.5	1.3	2.5	14.4	0.3	1.0	2.3
TOP-210HBM		15.0	0.4	1.1	2.5	18.0	0.3	0.9	2.0
TOP-212HBM		18.0	0.3	0.9	2.0	21.6		0.7	1.6
TOP-216HBM		24.0	0.2	0.7	1.5	28.8		0.5	1.2
TOP-220HBM		30.0		0.4	1.2	36.0		0.3	0.9

The above maximum pressure for motor output values are for when using ISO-VG46 oil with an oil temperature of 40 °C.

Motor Specifications

Open, drip-proof Condenser-start type

Output(W)	No. of Poles(P)	Rating	Voltage(V)	Frequency(Hz)	No. of Revolutions (min ⁻¹)	Current(A)	Approx. Weight(kg)
200	4	Continuous	100	50	1430	5.6	10
			200	60	1720	4.9	
400	4	Continuous	100	50	1420	8.4	15
			200	60	1710	7.6	
750	4	Continuous	100	50	1450	11.2	21
			200	60	1740	9.6	
						5.7	
						4.9	

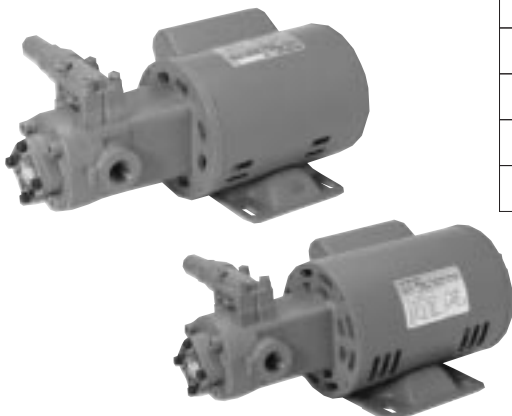
Model

TOP -	2ME	Motor Output	Phase	-	203HBM
		200	S		204HBM
		400	S		206HBM
		750	S		208HBM
					210HBM
					212HBM
					216HBM
					220HBM

Rotation Direction Relief Valve Relief Valve Set Pressure

No mark: Without relief valve
 VB: With relief valve
 VD: With relief valve (external return-type)
 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).

No mark: Clockwise rotation as seen from the pump side (standard rotation direction)
 R: Counterclockwise rotation as seen from the pump side



Model Examples

TOP-2ME200S-203HBMVB (200W, single-phase, with relief valve)

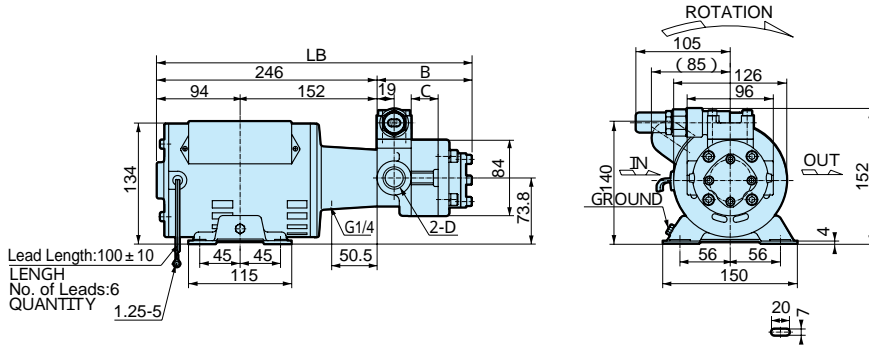
TOP-2ME400S-206HBMR (400W, single-phase, counterclockwise rotation as seen from the pump side)

TOP-2ME750S-210HBMVD (750W, single-phase, with relief valve <external return type>)

Dimensional Diagrams

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

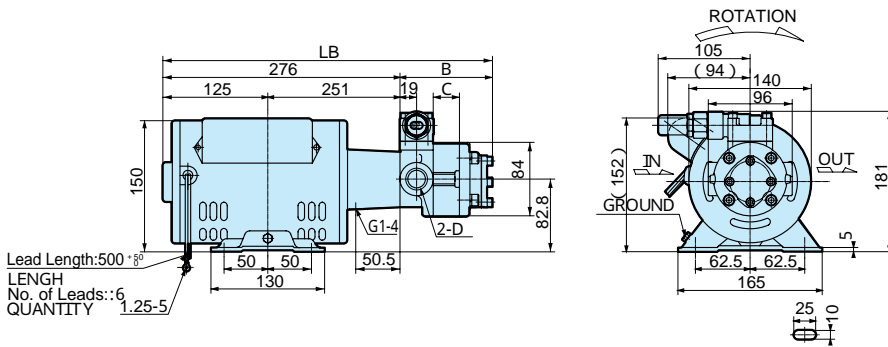
Model : TOP - 2ME200 S - 2HBMVB



Dimensions

Model	Item	LB	B	C	D
2ME200S-203HBMVB		329	83	7	Rc ^{1/2}
2ME200S-204HBMVB		332	86	10	
2ME200S-206HBMVB		337	91	15	
2ME200S-208HBMVB		342	96	20	Rc ^{3/4}
2ME200S-210HBMVB		347	101	25	
2ME200S-212HBMVB		352	106	30	
2ME200S-216HBMVB		362	116	40	

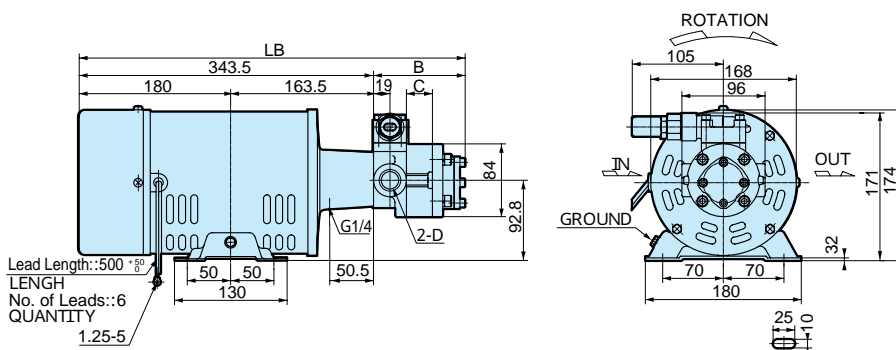
Model : TOP - 2ME400 S - 2HBMVB



Dimensions

Model	Item	LB	B	C	D
2ME400S-203HBMVB		359	83	7	Rc ^{1/2}
2ME400S-204HBMVB		362	86	10	
2ME400S-206HBMVB		367	91	15	
2ME400S-208HBMVB		372	96	20	Rc ^{3/4}
2ME400S-210HBMVB		377	101	25	
2ME400S-212HBMVB		382	106	30	
2ME400S-216HBMVB		392	116	40	
2ME400S-220HBMVB		402	126	50	

Model : TOP - 2ME750 S - 2HBMVB

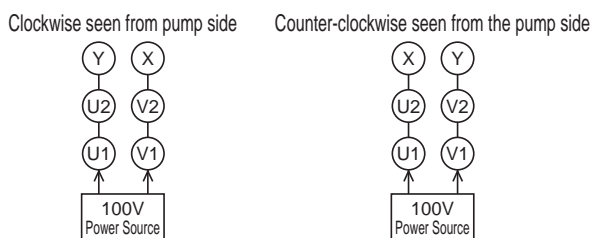


Dimensions

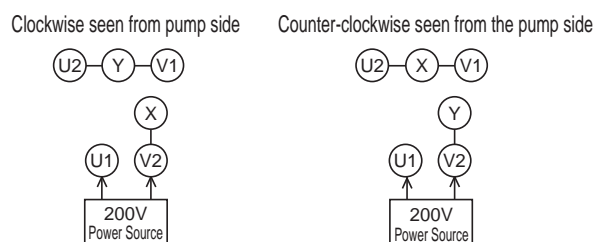
Model	Item	LB	B	C	D
2ME750S-203HBMVB		426.5	83	7	Rc ^{1/2}
2ME750S-204HBMVB		429.5	86	10	
2ME750S-206HBMVB		434.5	91	15	
2ME750S-208HBMVB		439.5	96	20	Rc ^{3/4}
2ME750S-210HBMVB		444.5	101	25	
2ME750S-212HBMVB		449.5	106	30	
2ME750S-216HBMVB		459.5	116	40	
2ME750S-220HBMVB		469.5	126	50	

Wiring Diagram

100V



200V



U2-Y-V1 in the clockwise direction as seen from the pump side
When going in the counter-clockwise direction as seen from the pump side, there will be no need to connect directly to the power source if the three lines of U2, X and V1 are bundled together.