

# TOP-1HG

## Specifications

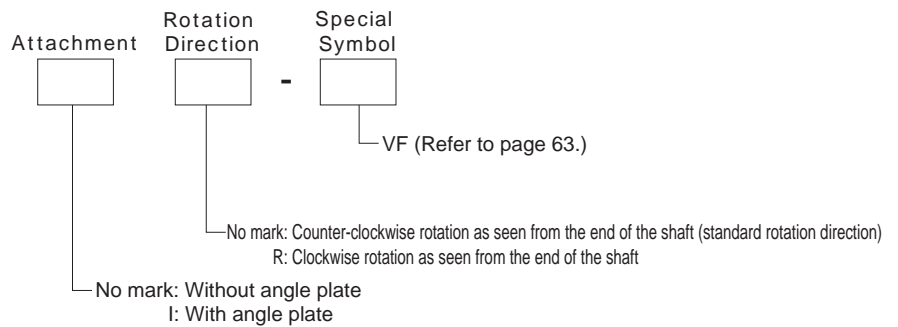
Model	Item	Theoretical Displacement cm <sup>3</sup> /rev	Theoretical Discharge ℓ /min		Max. Discharge Pressure MPa	Max. Revolution min <sup>-1</sup>	Approx. Weigh kg
			1500min <sup>-1</sup>	1800min <sup>-1</sup>			
TOP-11HG		1.5	2.2	2.7	2.5	3000	1.4
TOP-12HG		2.5	3.7	4.5	2.5	2500	1.5

The above maximum discharge and maximum revolution values are for when using ISO-VG46 oil with an oil temperature of 40 °C.

## Model



TOP - 11HG  
12HG



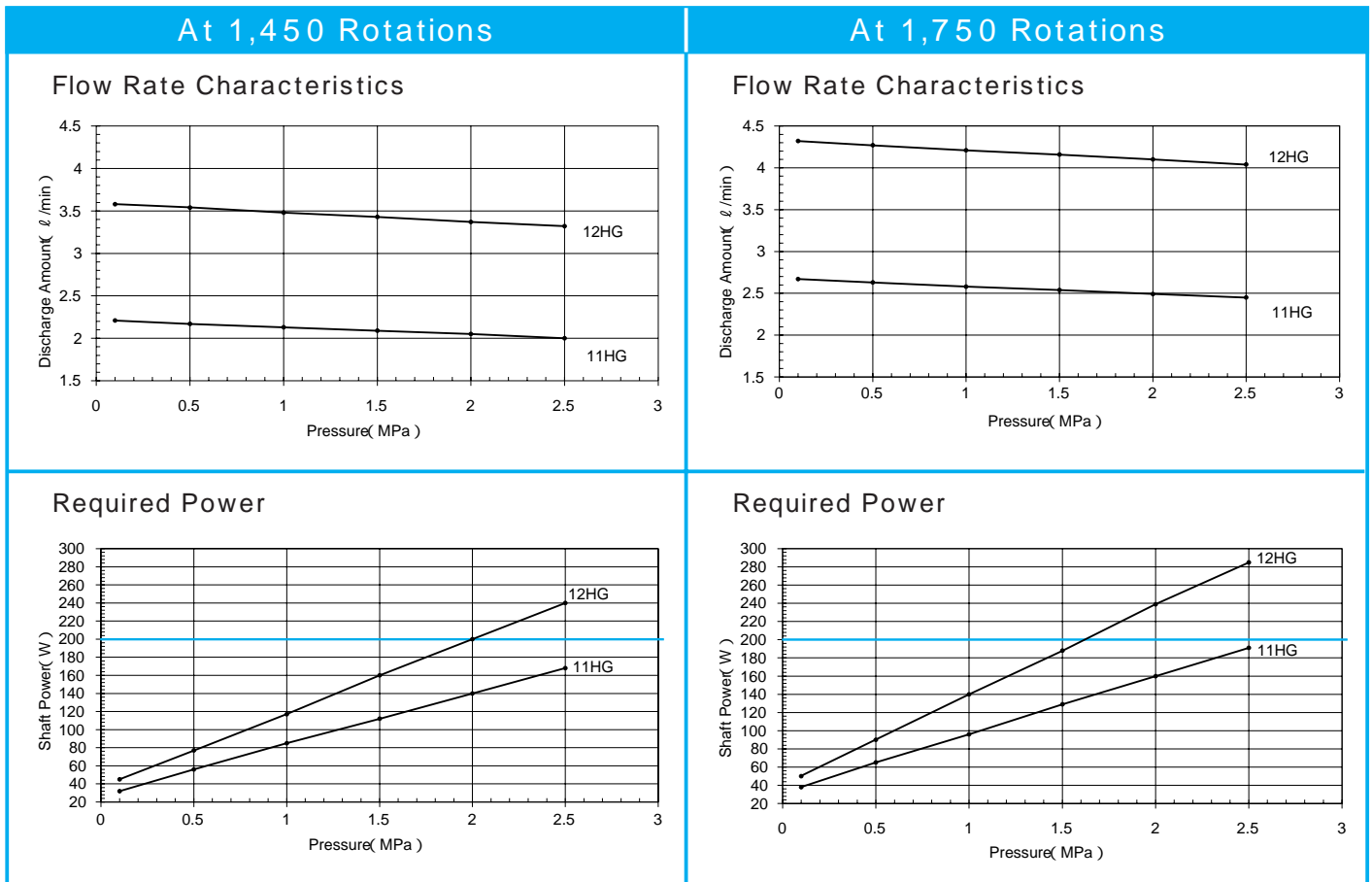
Model Examples:

TOP-11HGI (with angle plate)

TOP-12HGR (clockwise rotation as seen from the end of the shaft)

## Performance Table

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

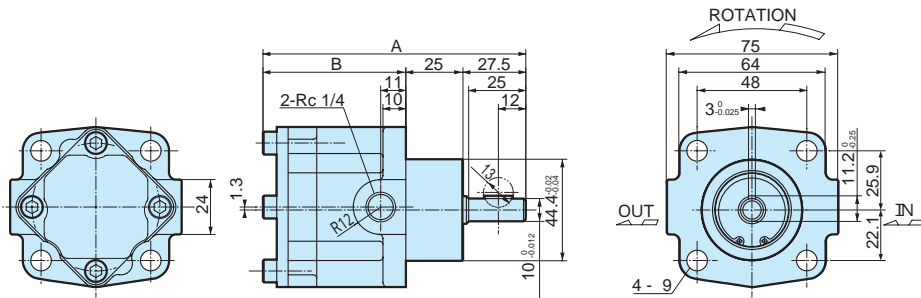


Select the best motor using the lines in the "Required Power" table as the applicable standards.

# Dimensional Diagrams

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

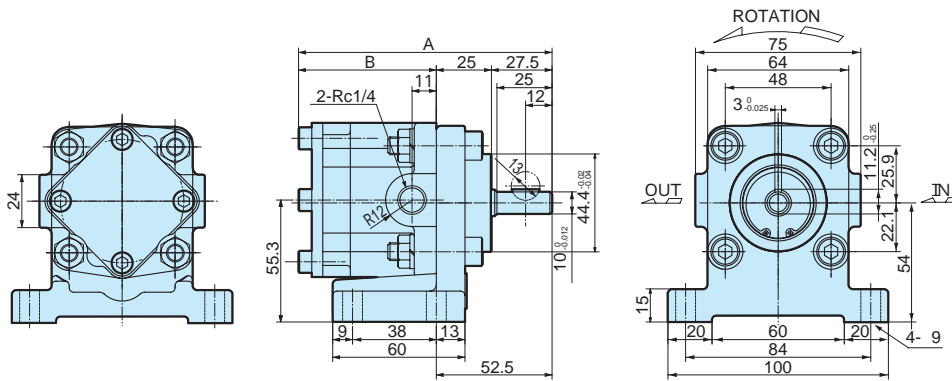
## Model : TOP - 1HG



Dimensions

Model	Item	A	B
11HG		110	57.5
12HG		115	62.5

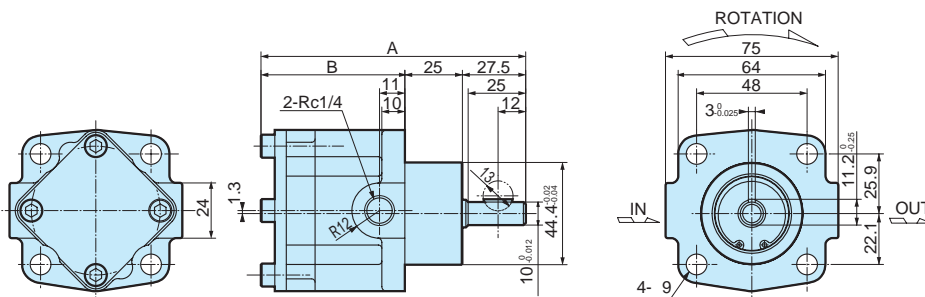
## Model : TOP - 1HGI



Dimensions

Model	Item	A	B
11HGI		110	57.5
12HGI		115	62.5

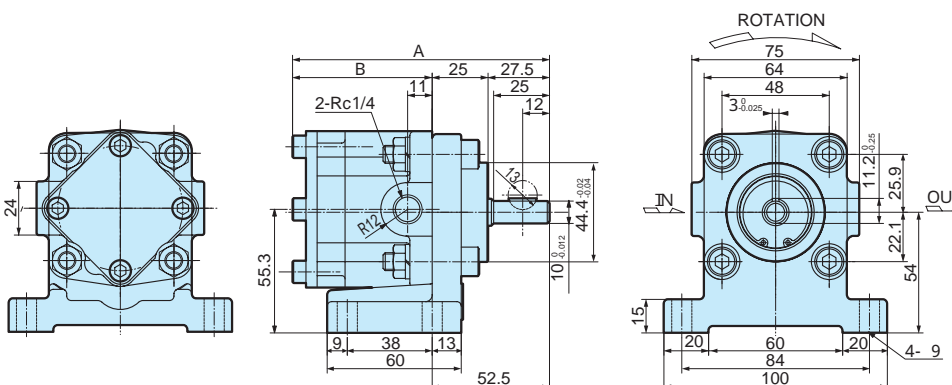
## Model : TOP - 1HGR



Dimensions

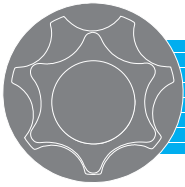
Model	Item	A	B
11HGR		110	57.5
12HGR		115	62.5

## Model : TOP - 1HGIR



Dimensions

Model	Item	A	B
11HGIR		110	57.5
12HGIR		115	62.5



# TOP-1MBY

Nippon Oil Pump Co., Ltd.

## Specifications

Model	Item	No. of Motor Revolutions 50Hz 1500min <sup>-1</sup>		No. of Motor Revolutions 60Hz 1800min <sup>-1</sup>			
		Theoretical Discharge ℓ / min	Max. Pressure for Motor Output (MPa)		Theoretical Discharge ℓ / min	Max. Pressure for Motor Output (MPa)	
			200W	400W		200W	400W
TOP-11HG		2.2	2.5	2.5	2.7	2.5	2.5
TOP-12HG		3.7	2.0	2.5	4.5	1.6	2.5

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

## Model

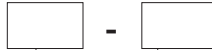
TOP - 1MBY 

Motor Output
200
400

 - 

11HG
12HG

Rotation Direction | Special Symbol



VF (Refer to page 63.)

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



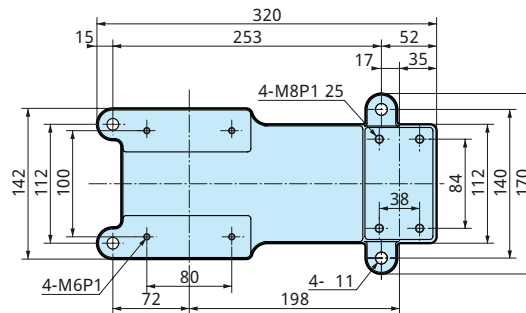
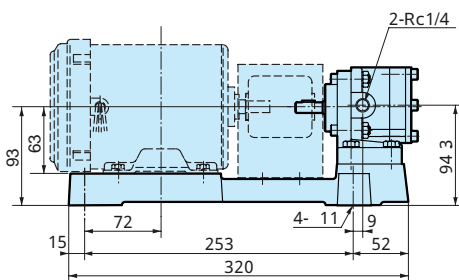
Model Examples:

TOP-1MBY200-11HGIR (200W, counter-clockwise rotation as seen from the pump side)

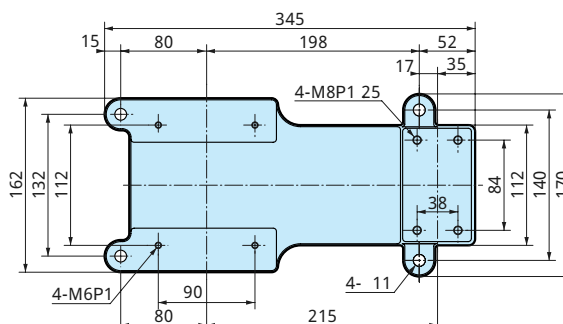
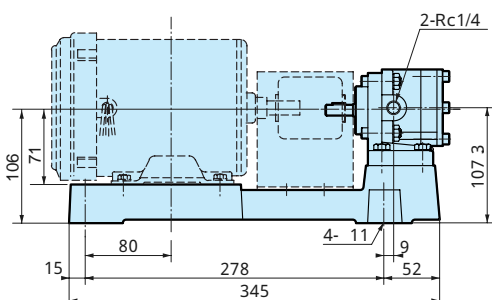
## Dimensional Diagrams

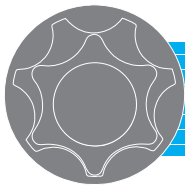
Be sure to check the Nippon Oil Pump homepage for the most up-to-date diagrams and dimensions.

Model : TOP - 1MBY200-1HGI



Model : TOP - 1MBY400-1HGI





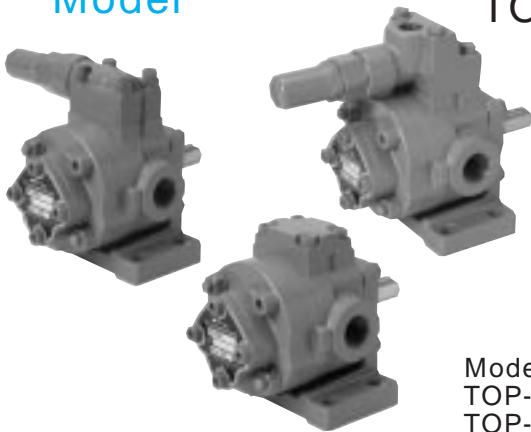
# TOP-2HB

## Specifications

Model	Item	Theoretical Displacement cm <sup>3</sup> /rev	Theoretical Discharge ℓ /min		Max. Discharge Pressure MPa	Max. Revolution min <sup>-1</sup>	Approx. Weight kg
			1500min <sup>-1</sup>	1800min <sup>-1</sup>			
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



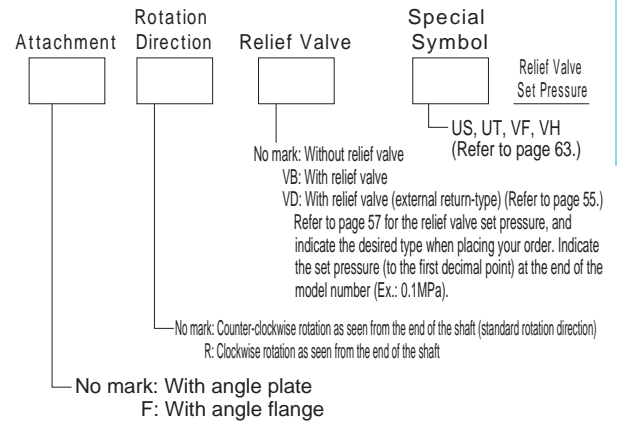
TOP -

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)

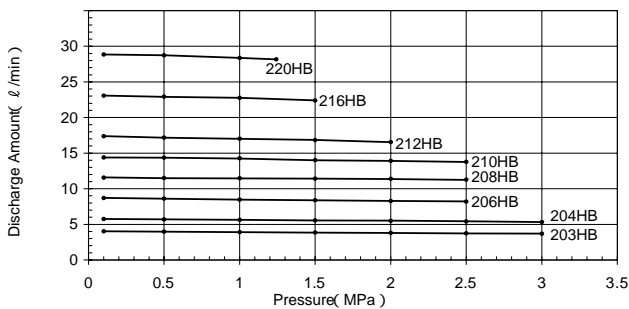


## Performance Table

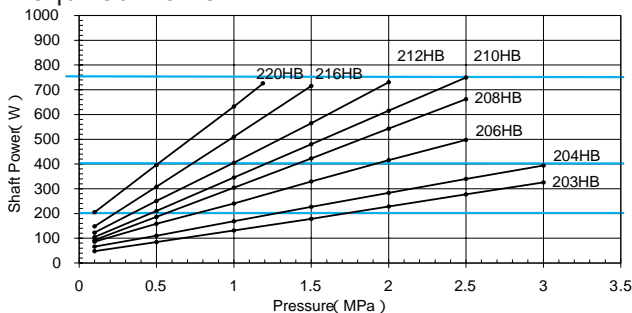
Test Conditions Oil: ISO-VG46 with a temperature of 40 °C

### At 1,450 Rotations

#### Flow Rate Characteristics

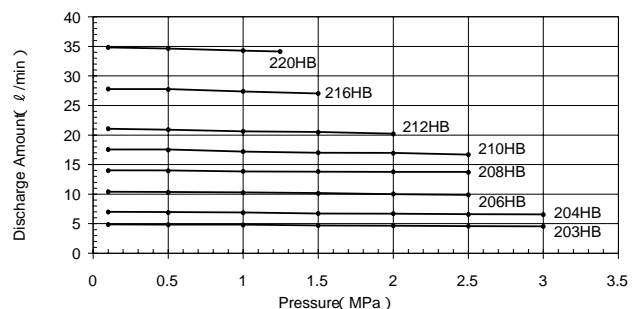


#### Required Power

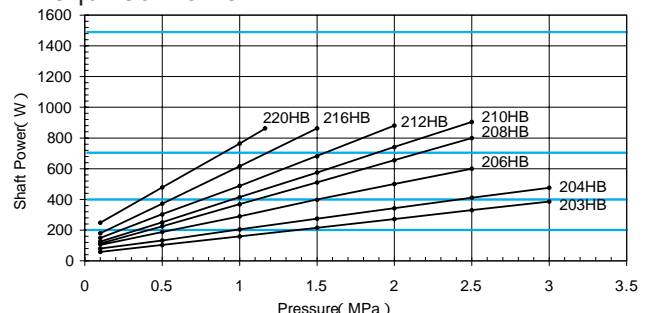


### At 1,750 Rotations

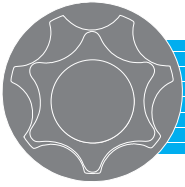
#### Flow Rate Characteristics



#### Required Power



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

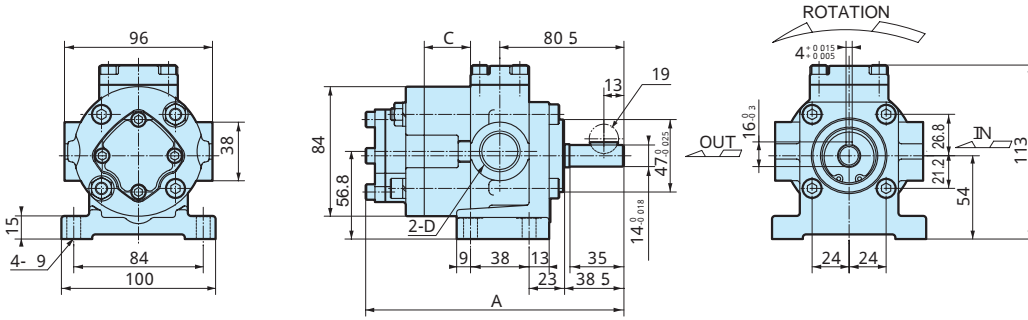


# TOP-2HB

## Dimensional Diagrams

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

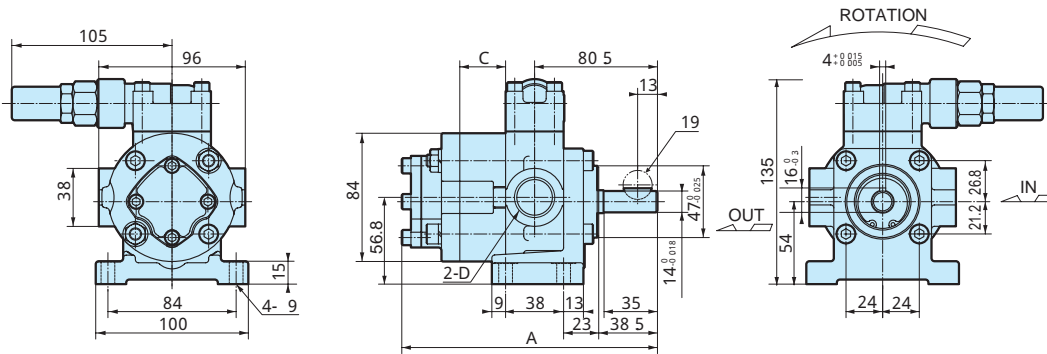
### Model : TOP - 2HB



Dimensions

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

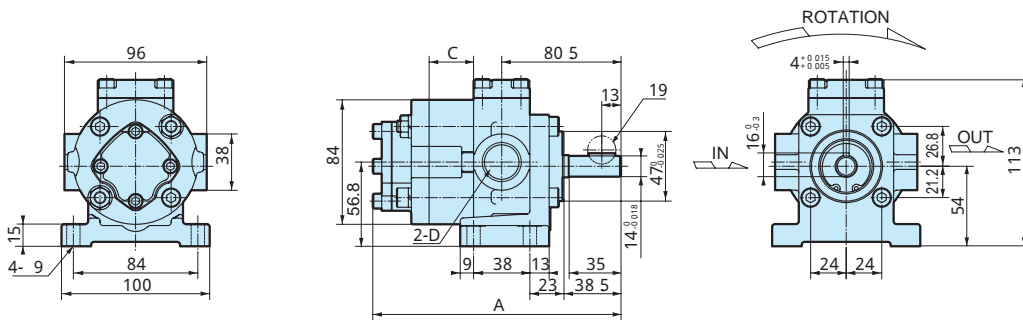
### Model : TOP - 2HBVB



Dimensions

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

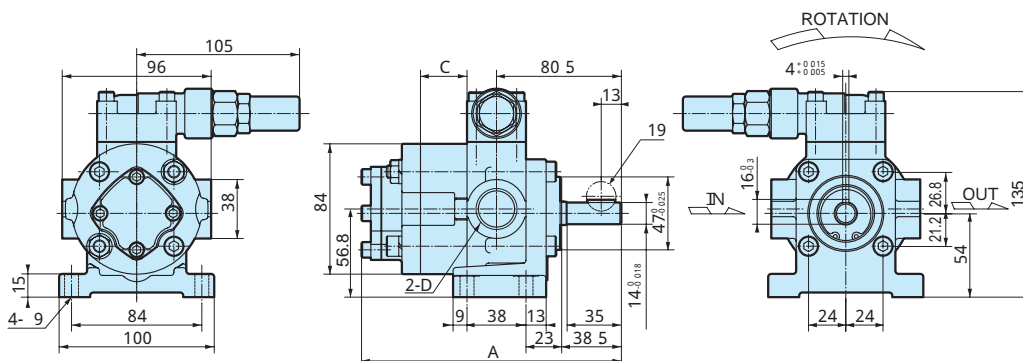
### Model : TOP - 2HBR



Dimensions

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

