

### IPH Series Double IP Pump

3.6 to 125.9cm<sup>3</sup>/rev  
30MPa

❖ All the types in this new design (11D) series are installation compatible with the previous design (10D). Note, however, that there is no longer compatibility for some of the seal components between the IPH-3 and IPH-4 sizes and the 3 and 4 sizes.

### Features

① Configured with the high-pressure, low-noise IPH Series and IP pumps, these double pumps greatly expand

the range of application for the IP pump.

② A wide selection of pump combinations provides options that are perfect for just about any type of application imaginable.

### Specifications

Model No.	Discharge Rate (1200min <sup>-1</sup> No-load)		Revolution Speed		Operating Pressure MPa(kgf/cm <sup>2</sup> )	Required Power at 1200min <sup>-1</sup> , 21MPa kW
	Vent Side ℓ/min	Shaft Side ℓ/min	Min. min <sup>-1</sup>	Max. min <sup>-1</sup>		
IPH-22B-*-*-(*)-11	4.3 to 9.8	4.3 to 9.8	600	2000	Rated: 21 {214} Max: 30 {306}	7.99
IPH-23B		12.2 to 18.9				11.6
IPH-24B		24.8 to 38.7				19.5
IPH-25B		48.9 to 76.6				34.5
IPH-26B	97.5 to 151.0	64.0				
IPH-33B	12.2 to 18.9	12.2 to 18.9	500	2000		15.3
IPH-34B		24.8 to 38.7				23.1
IPH-35B		48.9 to 76.6				38.1
IPH-36B		97.5 to 151.0				67.7
IPH-44B	24.8 to 38.7	24.8 to 38.7	400	2000		31.0
IPH-45B		48.9 to 76.6			46.0	
IPH-46B	48.9 to 76.6	97.5 to 151.0	300	2000	75.6	
IPH-55B		48.9 to 76.6			61.0	
IPH-56B	97.5 to 151.0	97.5 to 151.0	300	2000	90.6	
IPH-66B		97.5 to 151.0			119.3	

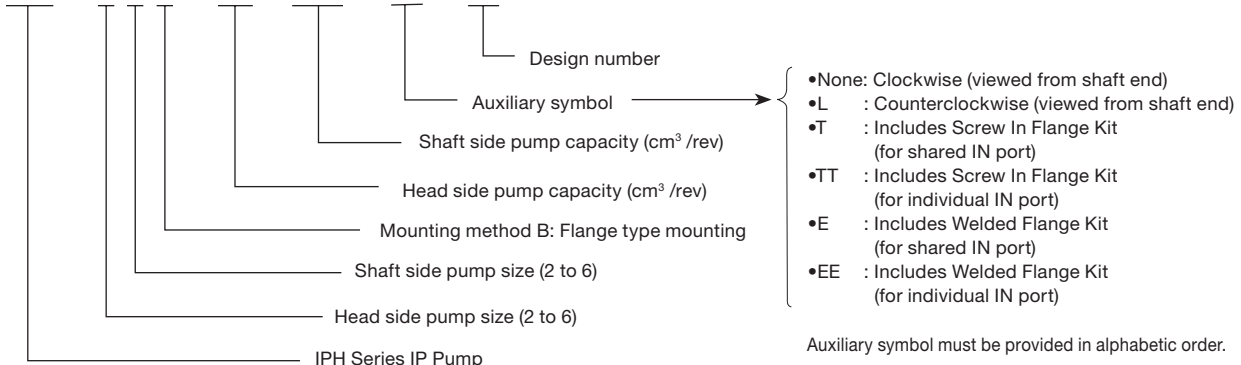
- Note) 1. Maximum Pressure: Maximum pressure limit when there are frequent pressure changes. However, maximum pressure is the same as rated pressure when load is applied to the head side and shaft side simultaneously.  
 2. Suction Pressure: -0.02 to +0.03 MPa {-0.2 to +0.3 kgf/cm<sup>2</sup>}  
 3. Avoid installation with the suction port towards the bottom of the pump. If the revolution speed will exceed 1800mm<sup>-1</sup>, provide separate piping for shaft side and head size IN ports.  
 4. Specify using the model number format shown below when pipe flange is required.  
 5. Working pressure is continuous operating pressure when the same pressure exists on the head side and shaft side.  
 6. Individual pump performance on the head side and shaft side is the same as that of the single pumps. Required power is the sum of the power required by each of the two pumps.  
 7. The "Required Power at 1200min<sup>-1</sup>, 21MPa (kW)" column in the above table are based on combinations that provide the maximum capacity for each model number, when pressure at both the head side and shaft side is 21MPa. Examples of combinations that provide "the maximum capacity for each model number" are IPH-22B-8-8-11 for IPH-22B, and IPH-46B-32-125-11 for IPH-46B. A capacity of 125 for all \*6B Type 6 pumps is used for calculations.

#### ● Handling

Handling is in accordance with procedures for the IPH pump. See page C-1 for more information.

### Explanation of model No.

IPH - 4 6 B - 20 - 125 - LT - 11

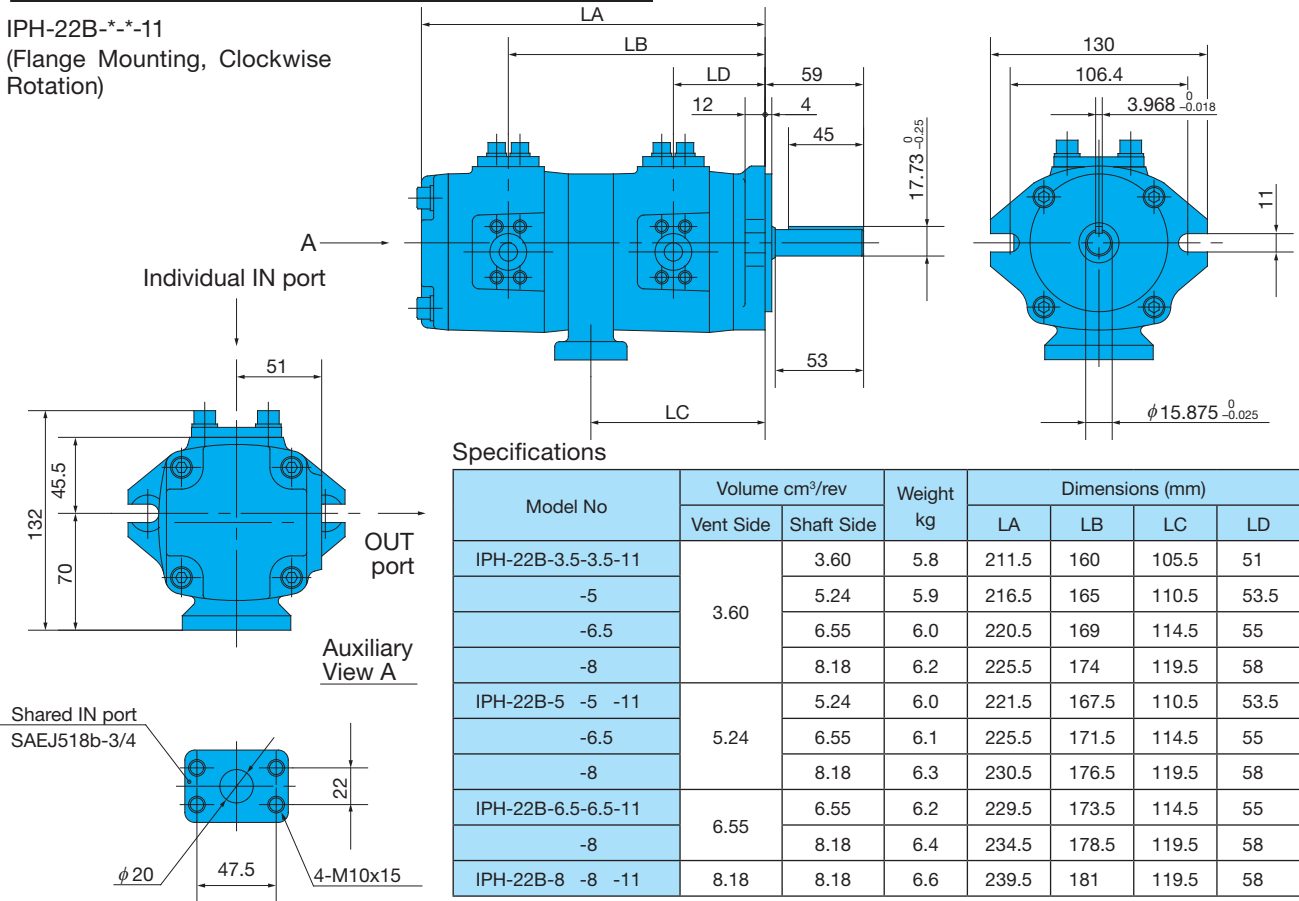


● IPH Series Double IP Pump Foot Mounting Kit  
See the IPH Series (single) IP pump section in page C-12.

● IPH Series Double IP Pump Pipe Flange  
See the IPH Series (single) IP pump section in page C-10.

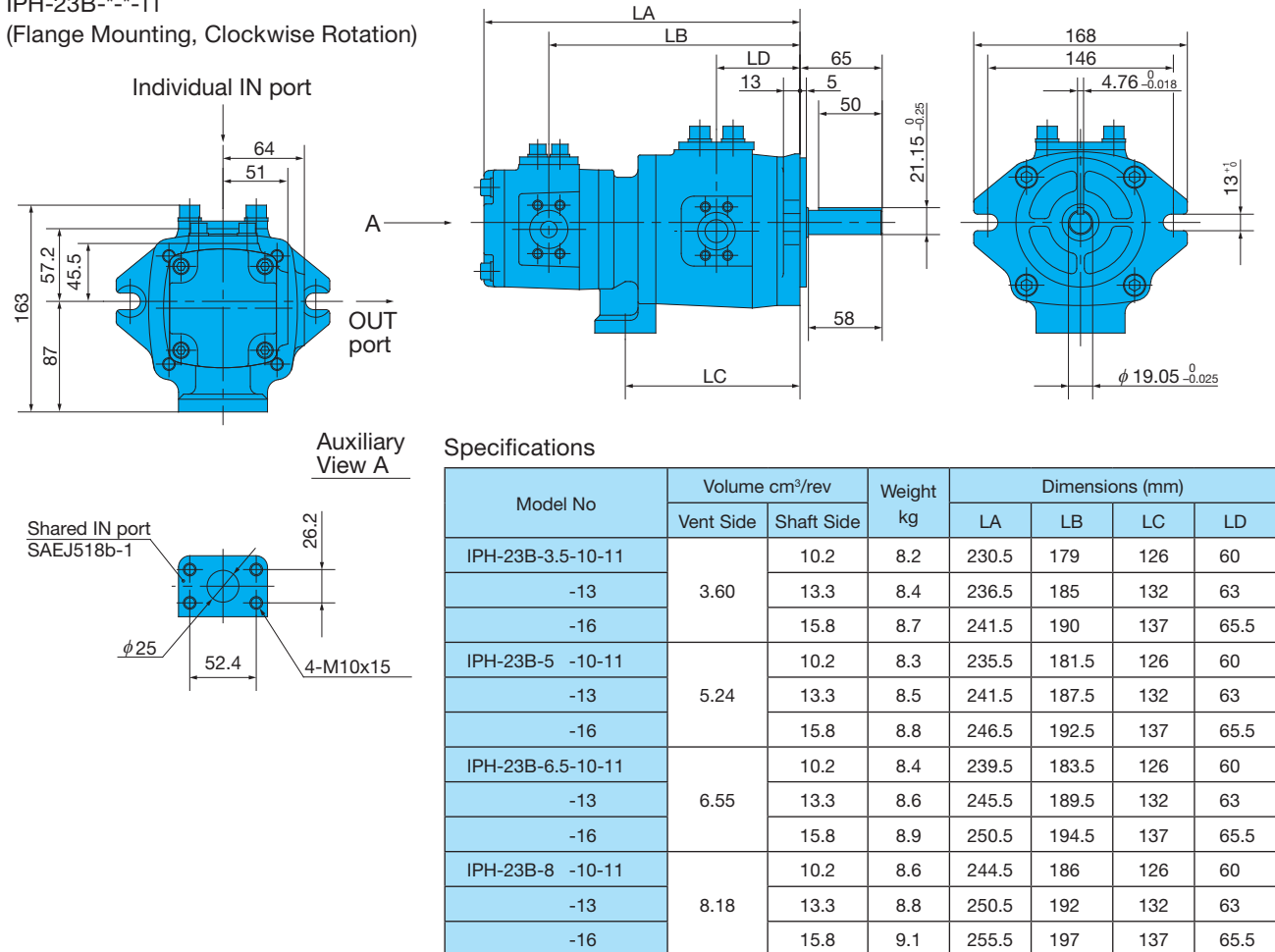
# Installation Dimension Drawings

IPH-22B-\*-11  
(Flange Mounting, Clockwise Rotation)



Note) Dimensions shown in this diagram are for a single pump.

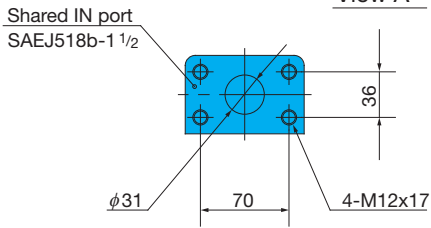
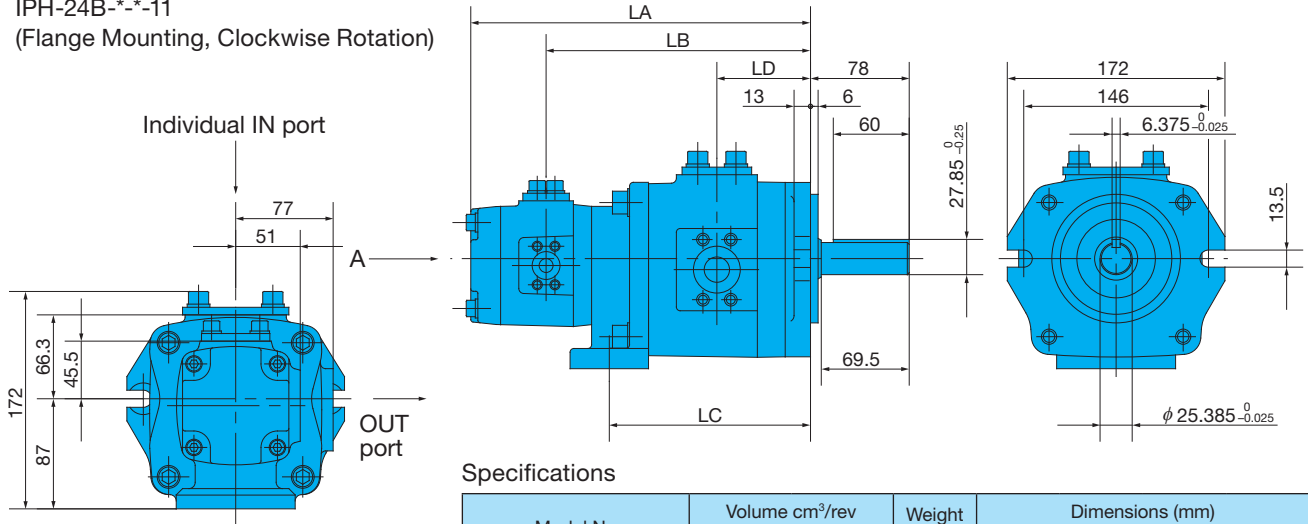
IPH-23B-\*-11  
(Flange Mounting, Clockwise Rotation)



Note) IPH-22B (23B)-\*-L-11 (foot mounting/flange mounting, counterclockwise rotation) are the mirror image of the drawings shown above. In the case the individual port is facing upwards, the discharge port flange is positioned to the right when viewed from the shaft side.



**IPH-24B-\*\*-\*-11**  
(Flange Mounting, Clockwise Rotation)

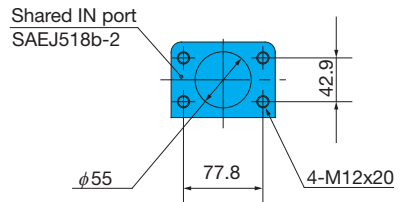
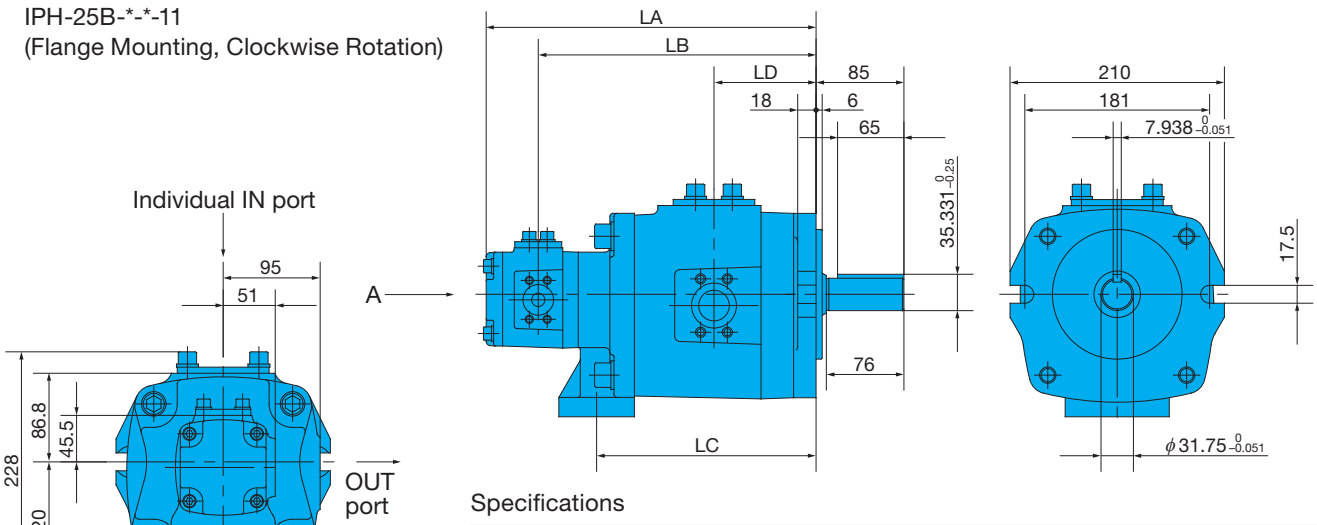


**Specifications**

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-24B-3.5-20-11	3.60	20.7	12.8	250.5	199	153	71
		25.7	13.3	256.5	205	159	74
		32.3	13.8	264.5	213	167	78
IPH-24B-5 -20-11	5.24	20.7	12.9	255.5	201.5	153	71
		25.7	13.4	261.5	207.5	159	74
		32.3	13.9	269.5	215.5	167	78
IPH-24B-6.5-20-11	6.55	20.7	13.0	259.5	203.5	153	71
		25.7	13.5	265.5	209.5	159	74
		32.3	14.0	273.5	217.5	167	78
IPH-24B-8 -20-11	8.18	20.7	13.2	264.5	206	153	71
		25.7	13.7	270.5	212	159	74
		32.3	14.2	278.5	220	167	78

Note) Dimensions shown in this diagram are for a single pump.

**IPH-25B-\*\*-\*-11**  
(Flange Mounting, Clockwise Rotation)

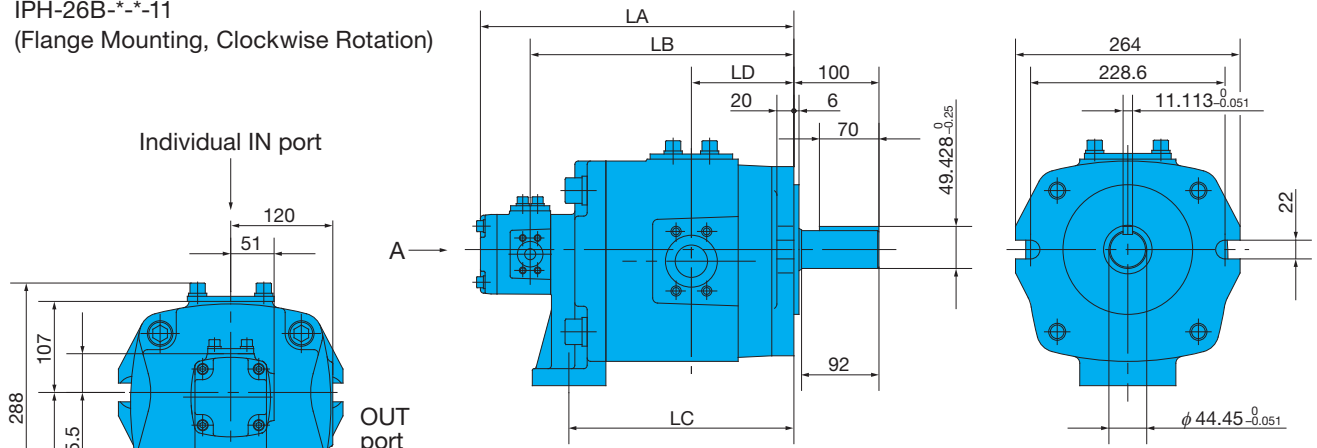


**Specifications**

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-25B-3.5-40-11	3.60	40.8	24.1	298.5	247	197	91
		50.3	25.1	305.5	254	204	94.5
		63.9	26.1	315.5	264	214	99.5
IPH-25B-5 -40-11	5.24	40.8	24.2	303.5	249.5	197	91
		50.3	25.2	310.5	256.5	204	94.5
		63.9	26.2	320.5	266.5	214	99.5
IPH-25B-6.5-40-11	6.55	40.8	24.3	307.5	251.5	197	91
		50.3	25.3	314.5	258.5	204	94.5
		63.9	26.3	324.5	268.5	214	99.5
IPH-25B-8 -40-11	8.18	40.8	24.5	312.5	254	197	91
		50.3	25.5	319.5	261	204	94.5
		63.9	26.5	329.5	271	214	99.5

Note) IPH-24B (25B)-\*\*-\*-L-11 (foot mounting/flange mounting, counterclockwise rotation) are the mirror image of the drawings shown above. In the case the individual IN port is facing upwards, the discharge port flange is positioned to the right when viewed from the shaft side.

**IPH-26B-\*-11**  
(Flange Mounting, Clockwise Rotation)

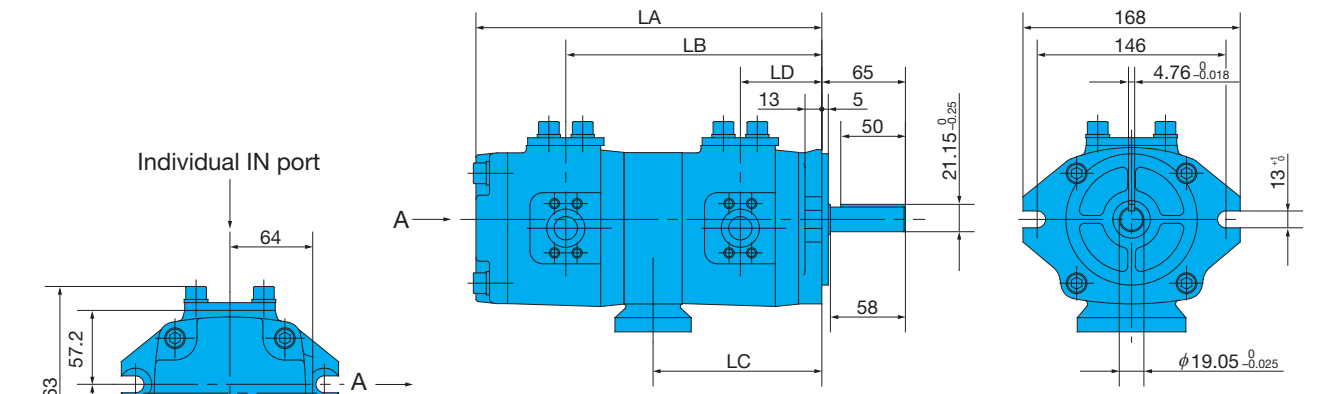


**Specifications**

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-26B-3.5- 80-11	3.60	81.3	45.8	345.5	294	240	111.5
		101.6	47.8	355.5	304	250	116.5
		125.9	49.8	367.5	316	262	122.5
IPH-26B-5 - 80-11	5.24	81.3	45.9	350.5	296.5	240	111.5
		101.6	47.9	360.5	306.5	250	116.5
		125.9	49.9	372.5	318.5	262	122.5
IPH-26B-6.5- 80-11	6.55	81.3	46.0	354.5	298.5	240	111.5
		101.6	48.0	364.5	308.5	250	116.5
		125.9	50.0	376.5	320.5	262	122.5
IPH-26B-8 - 80-11	8.18	81.3	46.2	357	301	240	111.5
		101.6	48.2	367	311	250	116.5
		125.9	50.2	379	323	262	122.5

Note) Dimensions shown in this diagram are for a single pump.

**IPH-33B-\*-11**  
(Flange Mounting, Clockwise Rotation)

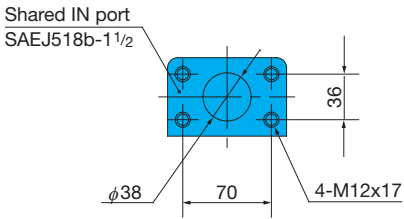
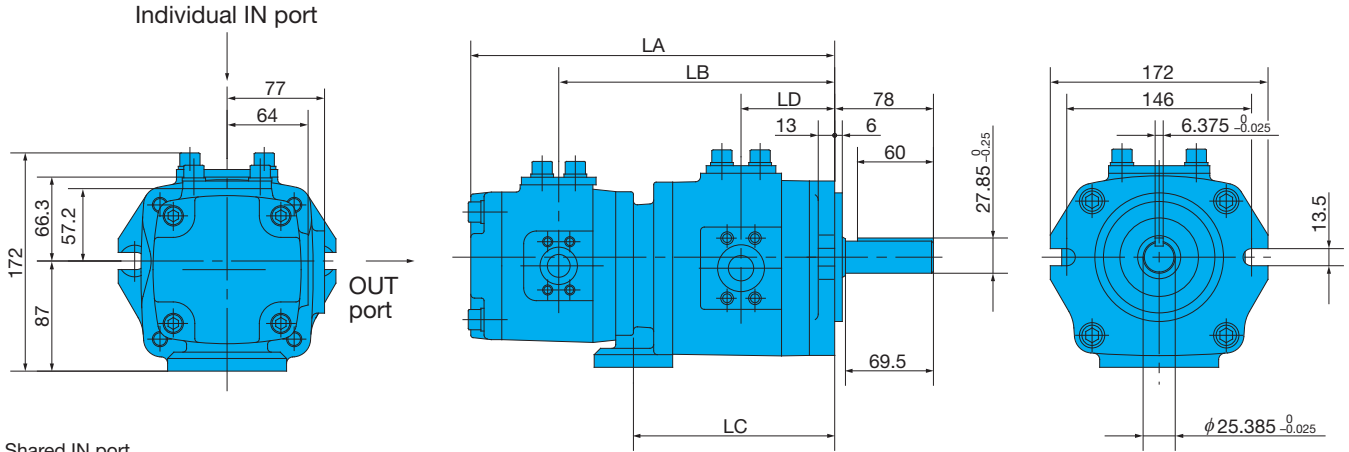


**Specifications**

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-33B-10-10-11	10.2	10.2	10.3	255.5	189	124.5	60
		13.3	10.5	261.5	195	130.5	63
		15.8	10.8	266.5	200	135.5	65.5
IPH-33B-13-13-11	13.3	13.3	10.5	267.5	198	130.5	63
		15.8	11.0	272.5	203	135.5	65.5
IPH-33B-16-16-11	15.8	15.8	11.3	277.5	205.5	135.5	65.5

Note) IPH-26B (33B)-\*-11 (foot mounting/flange mounting, counterclockwise rotation) are the mirror image of the drawings shown above. In the case the individual IN port is facing upwards, the discharge port flange is positioned to the right when viewed from the shaft side.

**IPH-34B-\*\*-11**  
(Flange Mounting, Clockwise Rotation)

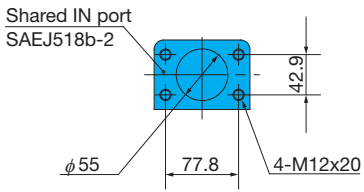
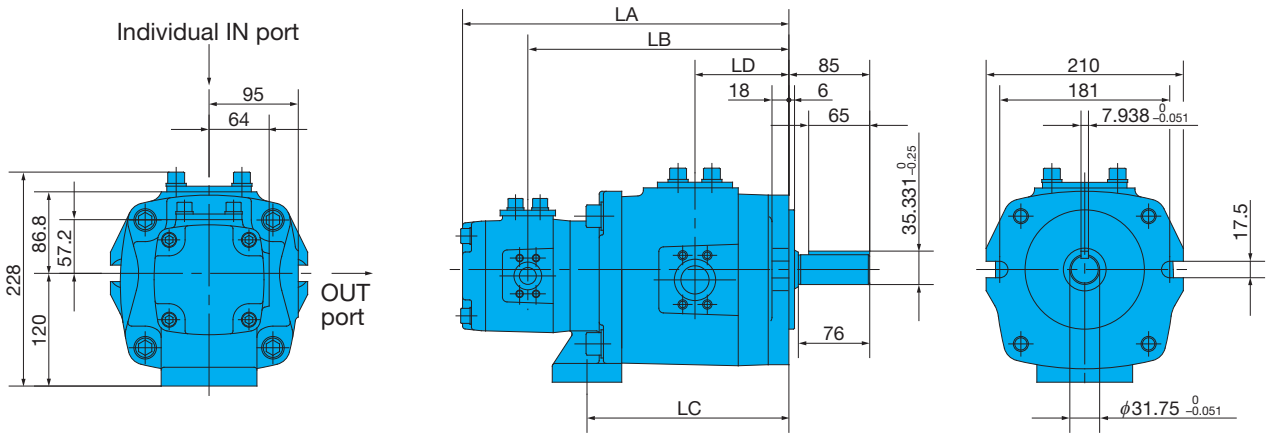


**Specifications**

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-34B-10-20-11	10.2	20.7	14.9	272	209	153	71
-25		25.7	15.4	278	215	159	74
-32		32.3	15.9	286	223	167	78
IPH-34B-13-20-11	13.3	20.7	15.1	278	212	153	71
-25		25.7	15.6	284	218	159	74
-32		32.3	16.1	292	226	167	78
IPH-34B-16-20-11	15.8	20.7	15.4	283	214.5	153	71
-25		25.7	15.9	289	220.5	159	74
-32		32.3	16.4	297	228.5	167	78

Note) Dimensions shown in this diagram are for a single pump.

**IPH-35B-\*\*-11**  
(Flange Mounting, Clockwise Rotation)

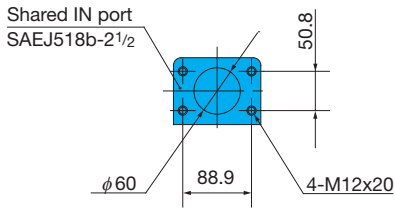
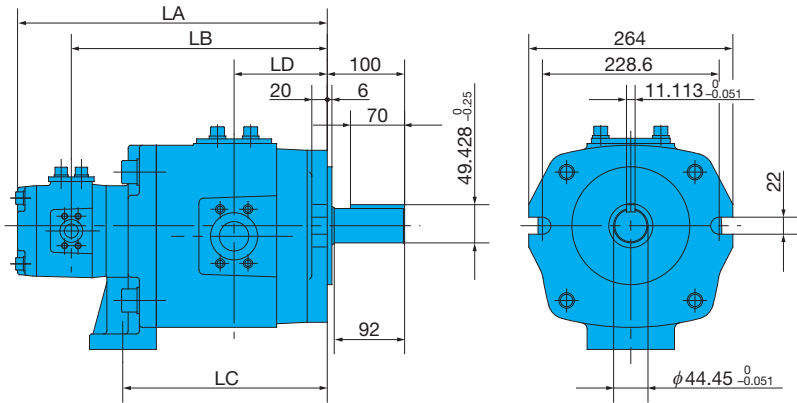
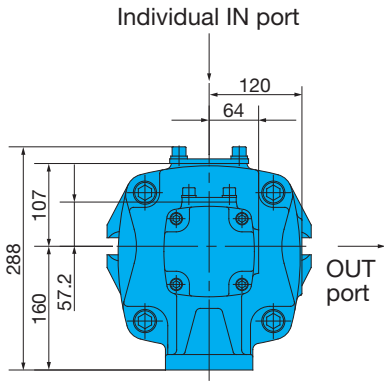


**Specifications**

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-35B-10-40-11	10.2	40.8	26.4	323.5	257	197	91
-50		50.3	27.4	330.5	264	204	94.5
-64		63.9	28.4	340.5	274	214	99.5
IPH-35B-13-40-11	13.3	40.8	26.6	329.5	260	197	91
-50		50.3	27.6	336.5	267	204	94.5
-64		63.9	28.6	346.5	277	214	99.5
IPH-35B-16-40-11	15.8	40.8	26.9	334.5	262.5	197	91
-50		50.3	27.9	341.5	269.5	204	94.5
-64		63.9	28.9	351.5	279.5	214	99.5

Note) IPH-34B (35B)-\*\*-L-11 (foot mounting/flange mounting, counterclockwise rotation) are the mirror image of the drawings shown above. In the case the individual IN port is facing upwards, the discharge port flange is positioned to the right when viewed from the shaft side.

IPH-36B-\*-\*-11  
(Flange Mounting, Clockwise Rotation)

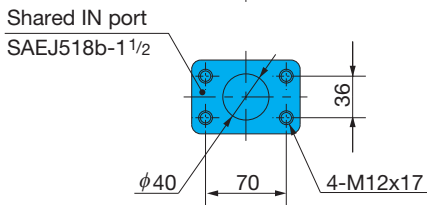
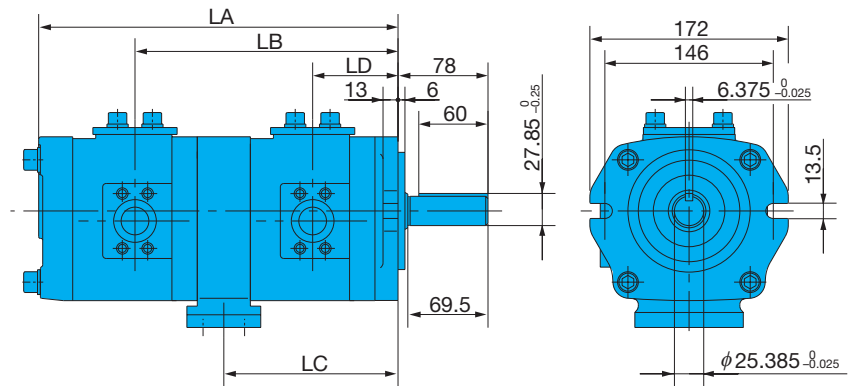
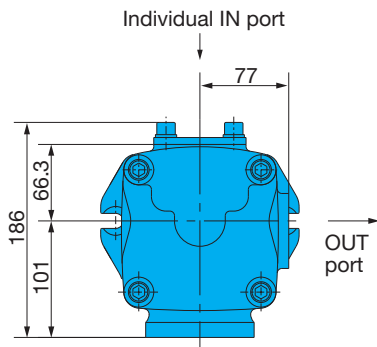


Specifications

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)				
	Vent Side	Shaft Side		LA	LB	LC	LD	
IPH-36B-10- 80-11	10.2	81.3	47.8	370.5	304	240	111.5	
		-100	101.6	49.8	380.5	314	250	116.5
		-125	125.9	51.8	392.5	326	262	122.5
IPH-36B-13- 80-11	13.3	81.3	48.0	376.5	307	240	111.5	
		-100	101.6	50.0	386.5	317	250	116.5
		-125	125.9	52.0	398.5	329	262	122.5
IPH-36B-16- 80-11	15.8	81.3	48.3	381.5	309.5	240	111.5	
		-100	101.6	50.3	391.5	319.5	250	116.5
		-125	125.9	52.3	403.5	331.5	262	122.5

Note) Dimensions shown in this diagram are for a single pump.

IPH-44B-\*-\*-11  
(Flange Mounting, Clockwise Rotation)



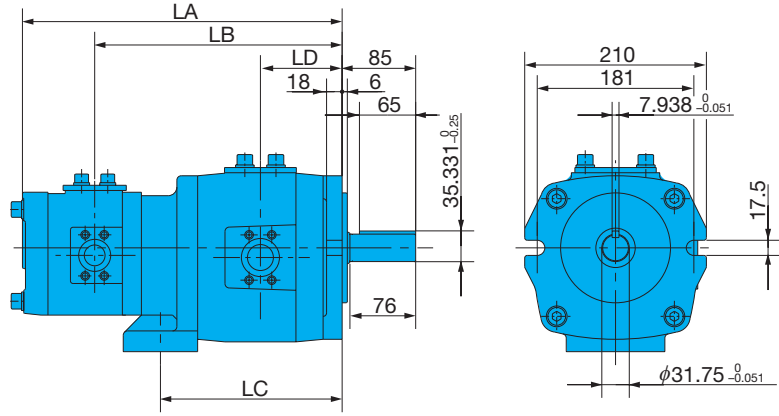
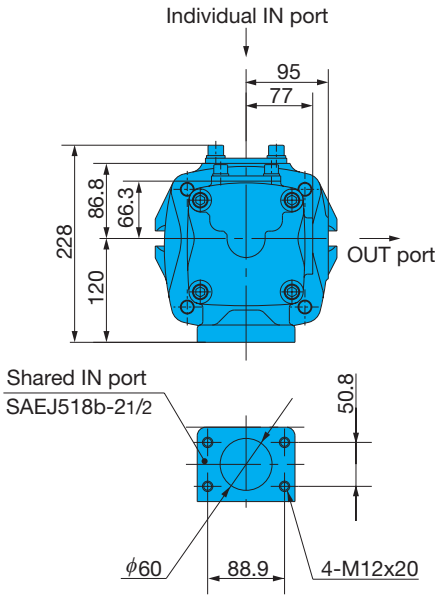
Specifications

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)				
	Vent Side	Shaft Side		LA	LB	LC	LD	
IPH-44B-20-20-11	20.7	20.7	19.5	307	219	145	71	
		-25	25.7	20.0	313	225	151	74
		-32	32.3	20.5	321	233	159	78
IPH-44B-25-25-11	25.7	25.7	20.5	319	228	151	74	
		-32	32.3	21.0	327	236	159	78
IPH-44B-32-32-11	32.3	32.3	21.5	335	240	159	78	

Note) IPH-36B (44B)-\*-\*-L-11 (foot mounting/flange mounting, counterclockwise rotation) are the mirror image of the drawings shown above. In the case the individual IN port is facing upwards, the discharge port flange is positioned to the right when viewed from the shaft side.



**IPH-45B-\*\*-\*-11**  
(Flange Mounting, Clockwise Rotation)

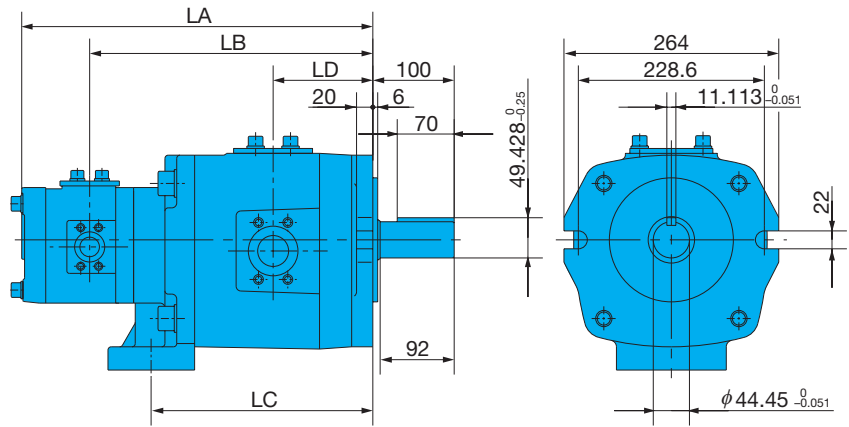
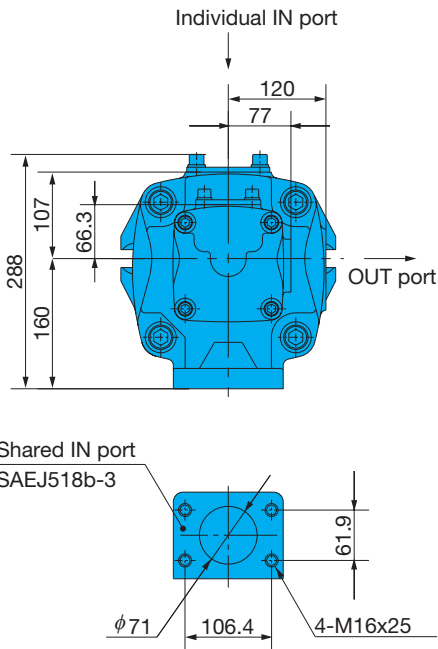


**Specifications**

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-45B-20-40-11	20.7	40.8	30.1	357	276	203	91
-50		50.3	31.1	364	283	210	94.5
-64		63.9	32.1	374	293	220	99.5
IPH-45B-25-40-11	25.7	40.8	30.6	363	279	203	91
-50		50.3	31.6	370	286	210	94.5
-64		63.9	32.6	380	296	220	99.5
IPH-45B-32-40-11	32.3	40.8	31.1	371	283	203	91
-50		50.3	32.1	378	290	210	94.5
-64		63.9	33.1	388	300	220	99.5

Note) Dimensions shown in this diagram are for a single pump.

**IPH-46B-\*\*-\*-11**  
(Flange Mounting, Clockwise Rotation)

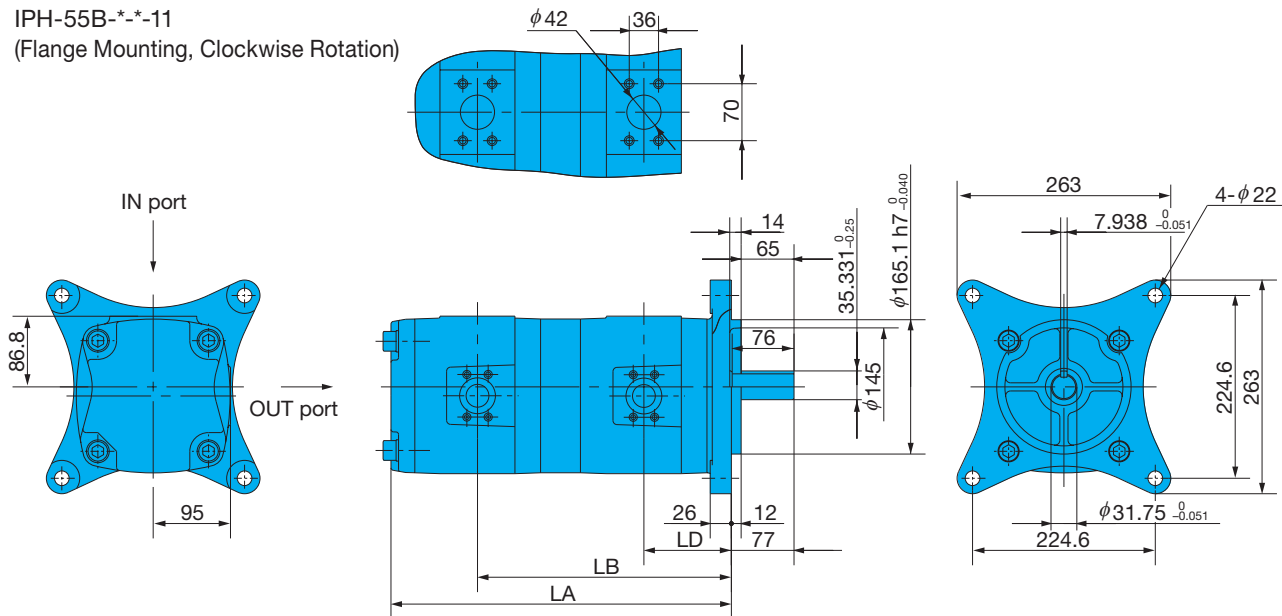


**Specifications**

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-46B-20- 80-11	20.7	81.3	52.1	404	323	250	111.5
-100		101.6	54.1	414	333	260	116.5
-125		125.9	56.1	426	345	272	122.5
IPH-46B-25- 80-11	25.7	81.3	52.6	410	326	250	111.5
-100		101.6	54.6	420	336	260	116.5
-125		125.9	56.6	432	348	272	122.5
IPH-46B-32- 80-11	32.3	81.3	53.1	418	330	250	111.5
-100		101.6	55.1	428	340	260	116.5
-125		125.9	57.1	440	352	272	122.5

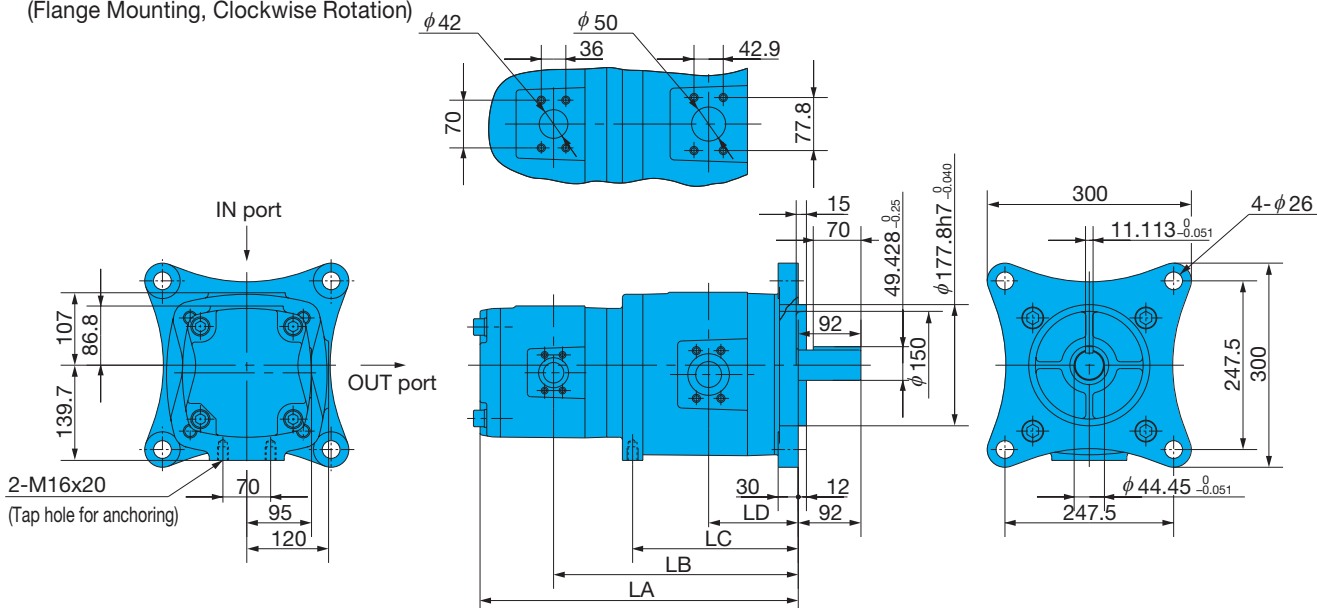
Note) Dimensions shown in this diagram are for a single pump.

Note) IPH-45B (46B)-\*\*-\*-L-11 (foot mounting/flange mounting, counterclockwise rotation) are the mirror image of the drawings shown above. In the case the individual IN port is facing upwards, the discharge port flange is positioned to the right when viewed from the shaft side.

**IPH-55B-\*-\*-11**  
 (Flange Mounting, Clockwise Rotation)

**Specifications**

Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)		
	Vent Side	Shaft Side		LA	LB	LD
IPH-55B-40-40-11	40.8	40.8	45.5	385	286	99
-50		50.3	46.5	392	293	102.5
-64		63.9	47.5	402	303	107.5
IPH-55B-50-50-11	50.3	50.3	47.5	399	296.5	102.5
-64		63.9	48.5	409	306.5	107.5
IPH-55B-64-64-11	63.9	63.9	49.5	419	311.5	107.5

Note) Dimensions shown in this diagram are for a single pump.

**IPH-56B-\*-\*-11**  
 (Flange Mounting, Clockwise Rotation)

**Specifications**

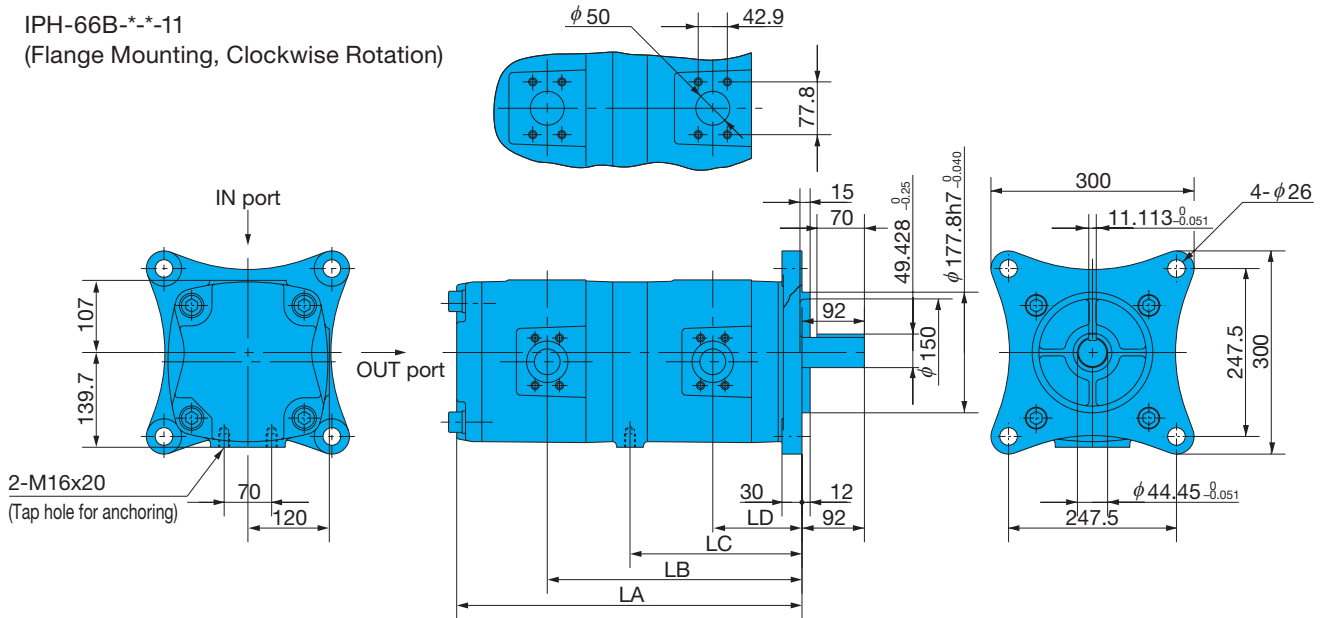
Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-56B-40- 80-11	40.8	81.3	70.6	427	328	221	120.5
-100		101.6	72.6	437	338	231	125.5
-125		125.9	74.6	449	350	243	131.5
IPH-56B-50- 80-11	50.3	81.3	71.6	434	331.5	221	120.5
-100		101.6	73.6	444	341.5	231	125.5
-125		125.9	75.6	456	353.5	243	131.5
IPH-56B-64- 80-11	63.9	81.3	72.6	444	336.5	221	120.5
-100		101.6	74.6	454	346.5	231	125.5
-125		125.9	76.6	466	358.5	243	131.5

Note) Dimensions shown in this diagram are for a single pump.

Note) IPH-55B (56B)-\*-\*-L-11 (foot mounting/flange mounting, counterclockwise rotation) are the mirror image of the drawings shown above. In the case the individual IN port is facing upwards, the discharge port flange is positioned to the right when viewed from the shaft side.



IPH-66B-\*\*-\*-11  
(Flange Mounting, Clockwise Rotation)



**Specifications**

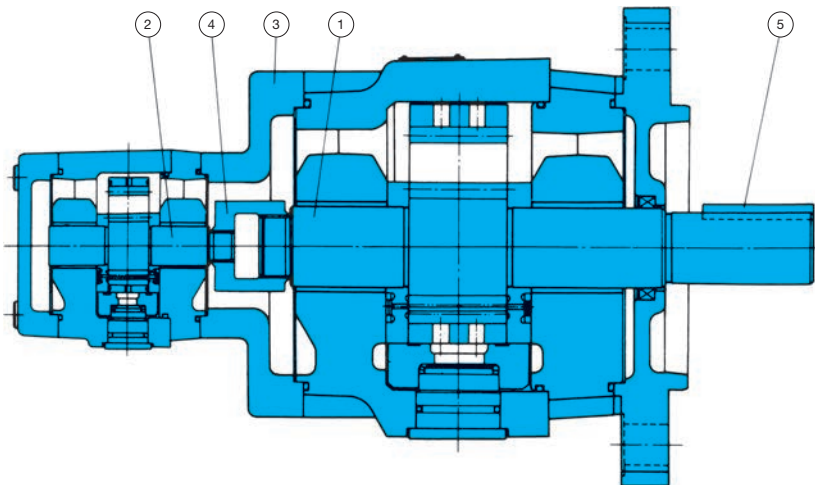
Model No	Volume cm <sup>3</sup> /rev		Weight kg	Dimensions (mm)			
	Vent Side	Shaft Side		LA	LB	LC	LD
IPH-66B- 80- 80-11	81.3	81.3	89.1	470	347.5	234	120.5
-100		101.6	91.1	480	357.5	244	125.5
-125		125.9	93.1	492	369.5	256	131.5
IPH-66B-100-100-11	101.6	101.6	93.1	490	362.5	244	125.5
-125		125.9	95.1	502	374.5	256	131.5
IPH-66B-125-125-11	125.9	125.9	97.1	514	380.5	256	131.5

Note) Dimensions shown in this diagram are for a single pump.

Note) IPH-66B-\*\*-L-11 (foot mounting/flange mounting, counterclockwise rotation) are the mirror image of the drawings shown above. In the case the suction port flange is facing upwards, the discharge port flange position is to the right when viewed from the shaft side.

**Cross-sectional Drawing**

IPH Series Double IP Pump



Part No.	Part Name
1	Pinion shaft -1
2	Pinion shaft -2
3	Body -3
4	Joint
5	Key

Note) In the case of a double pump, use single pump parts in addition to the 5 parts listed above.

● **IPS Series Double IP Pump Seal Kit**  
The double pump seal kit combines a shaft side pump seal kit with a head side pump seal kit. The shaft side pump seal kit (IHAS-2S\*\*\*\*-\*\*) is the same as the single pump seal kit. The head side pump seal kit (IHAS-

2H\*\*\*\*-\*\*) includes the same component parts as the single pump seal kit, except that it does not have a #23 oil seal. See the IPH Series (single) IP pump section in page C-9 for more information.

● **Air bleed-off valve**  
See the IPH Series (single) IP pump section in page C-13.