

Features

- ① An energy-saving pump with a top-runner efficiency (equivalent to IE3) motor (LPW-e).
- ② Strong and tough enough to resist dirty coolants.
- ③ Highly durable due to FCD, the impeller's material and the non-seal (mechanical seal-less) structure.
- ④ Mounting the inlet piping allows you to freely set the operating water level (LPW40-e/LPW65-e).
- ⑤ Can be used for high viscosity coolants (LPW40-e/LPW65-e).
- ⑥ Diverse lineup compatible with various efficiencies.

LPW-e type: Mounted with a top-runner efficiency (equivalent to IE3) motor.

LPW-7W type: Mounted with a U.S. UL-approved motor (NEMA premium efficiency) (3.0kW or less).

LPW-G/GS type: Equipped with a Chinese energy standard regulation (GB18613-2012) efficiency (grade GB3) motor *.

Note) * LPW-G type is equipped with a high efficiency motor that meets grade GB3 efficiency. (This is not certified as it is a non-regulated pump.)

Description of types

LPW 65 3 /2 A - 6 5.5 L -e

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Model
- ② Bore diameter
- ③ Number of casing stages
- ④ Number of impellers (none if number is equal to number of casing stages)
- ⑤ Level of viscosity to be used with (A, C: for low viscosity, D: for high viscosity)
- ⑥ Frequency (5: 50Hz, 6: 60Hz, no mark: for both 50/60Hz)
- ⑦ Output
- ⑧ Identification mark
- ⑨ Efficiency regulation-compliant

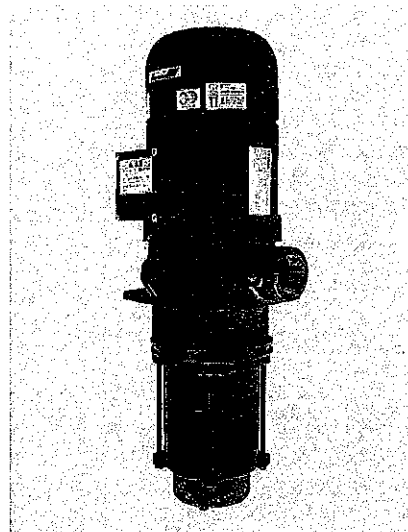
-e : Mounted with a top-runner efficiency (equivalent to IE3) motor.

-7W: Mounted with a U.S. UL-approved motor (NEMA premium efficiency) (3.0kW or less).

-G*: Equipped with a Chinese energy label regulation (GB18613-2012) efficiency equivalent (grade GB3) motor·50Hz, 200V.

-GS: Equipped with a Chinese energy label regulation (GB18613-2012) efficiency-compliant (grade GB3) motor·50Hz, 380V.

Note) * LPW-G type is equipped with a high efficiency motor that meets grade GB3 efficiency. (This is not certified as it is a non-regulated pump.)



Standard Specification

Diameter		40mm	50mm	65mm
Used liquid	Property liquid	Coolants of the kinematic viscosity equivalent to that of water-soluble coolants or water containing an additive (anticorrosive, etc.) ^{*1}		Water-soluble coolant liquid ^{*1}
	Temperature	0 to 60°C (No frozen liquid)		
	Allowable dynamic viscosity	40C : 32mm ² /s 40D : 150mm ² /s	1mm ² /s	
Installation site		Indoor Ambient temperature: 0 to 40°C, 85% RH or less (no condensation) Place at altitude of 1000 m or less. Do not place in direct sunlight. Place in an area free of corrosive or explosive gas or vapor.		
Material	Casing (Suction/Discharge/Intermediate)	FC200		
	Impeller	FCD450		
	Shaft	S45C		
Sealing structure		Non-seal (mechanical-seal-less)		
Motor	Power source ^{*2}	3 phase 50/60/60Hz 200/200/220V		
	Type	Totally enclosed fan cooled, indoor		Totally enclosed fan cooled type, outdoor ^{*3}
	Protection method ^{*4}	IP44		IP55
	Class of heat resistance	F		
	Rated value	IP44		
	Number of poles	2P		
Paint color		Munsell N1.5		

*1 The unit is not used for water and special liquids such as printing and acidic liquids. Contact us when using the unit for other special liquids (e.g. ceramic).

*2 -7W type: 60Hz 208/230/460V, -G type: 50Hz 200V, -GS type: 50Hz 380V

*3 We cannot set the pump outside. -G/GS type has a totally enclosed fan cooled, indoor

*4 -7W type: IP54, -G/GS type: IP43 under 3.0kW

-G/GS type: Please contact us 5.5kW and above.

Special specification

Shaft structure change (wear resistance improvement)
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Table of Consumable Parts

Output (kW)	Specification	Bearing		Oil seal	
		Load side	Unload side	Load side	Unload side
0.75	-G/GS	6306ZZC3	6203ZZC3	VC30508	—
1.5		6306ZZC3	6303ZZC3		
2.2		6306ZZC3	6303ZZC3		
3.0		6307ZZC3	6205ZZC3		
5.5	-e	6309ZZC3	6306ZZC3	VC45628	VC30528
7.5		6309ZZC3	6306ZZC3		
0.75	-7W	6306ZZC3	6203ZZCM	SC30457	HM25385
1.5		6306ZZC3	6205ZZCM		
2.2		6306ZZC3	6205ZZCM		
3.0		6307ZZC3	6205ZZCM		

* Please contact us for -G/GS model 5.5 kW and above

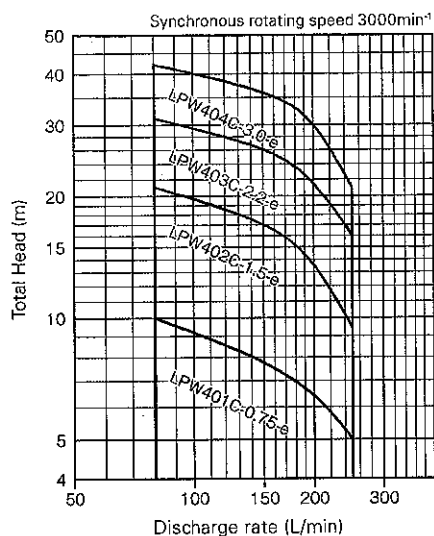
Bore diameter (mm)	O-ring (for companion flange)	O-ring (for water seal plate)
50	S67	—
65	—	S66

■ Selection chart

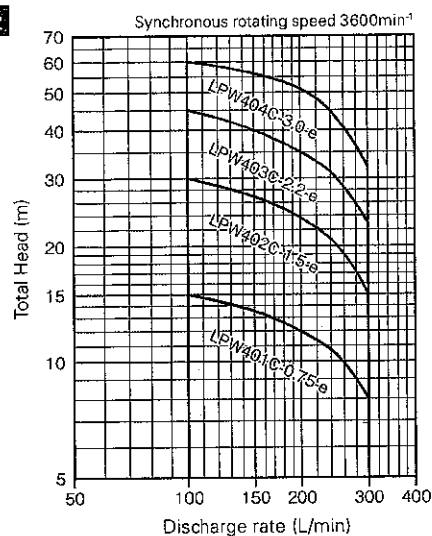
● LPW40

● For low viscosity liquid (Values for normal temperature, fresh water, with specific weight 1)

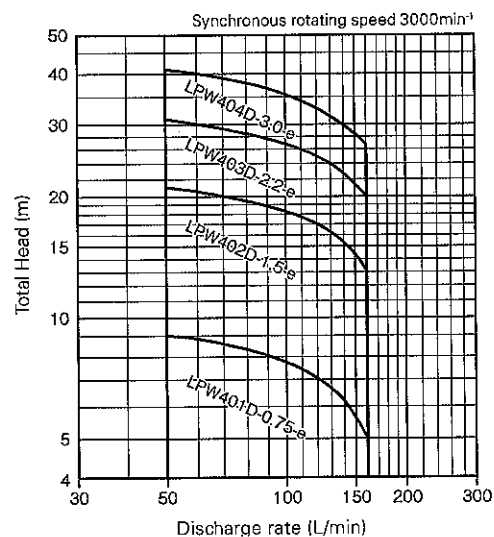
50Hz



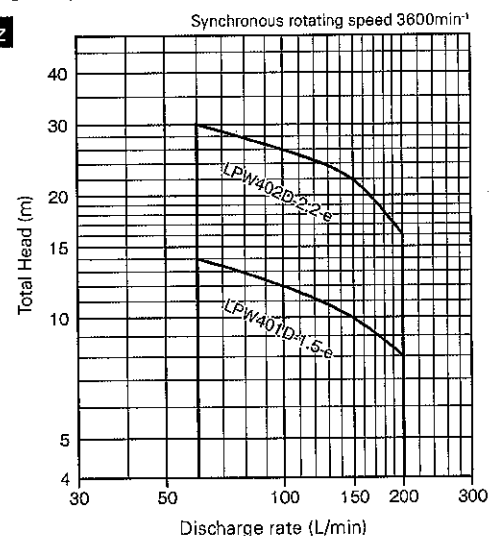
60Hz

● For high-viscosity liquid (Value at 150 mm²/s kinematic viscosity, specific gravity 1)

50Hz



60Hz



※ 7W/G/GS type is the same as the above selection chart.

Specification table

● LPW40

Bore diameter (mm)	Frequency (Hz)	Used liquids	Output (kW)	Type	Rated voltage (V)	Rated current (A)	Starting current (A)	Discharge rate (L/min)	Total head (m)
40	50	For low viscosity liquid	0.75	LPW401C-0.75-e	200	3.5	20.5	80 ~ 250	10 ~ 5
				LPW401C-0.75-G	200	3.8	22.2		
				LPW401C-0.75-GS	380	2.0	12.0		
			1.5	LPW402C-1.5-e	200	5.6	45.0		21 ~ 9.5
				LPW402C-1.5-G	200	6.1	34.0		
				LPW402C-1.5-GS	380	3.3	18.8		
			2.2	LPW403C-2.2-e	200	8.0	64.0		31 ~ 16
				LPW403C-2.2-G	200	8.9	49.0		
				LPW403C-2.2-GS	380	5.2	26.0		
		3.0		LPW404C-3.0-e	200	13.0	107		42 ~ 21
				LPW404C-3.0-G	200	14.3	98.0		
				LPW404C-3.0-GS	380	7.5	52.0		
	50	For high-viscosity liquid	0.75	LPW401D-0.75-e	200	4.0	20.5	50 ~ 160	9 ~ 5
			1.5	LPW402D-1.5-e	200	6.6	45.0		21 ~ 13
			2.2	LPW403D-2.2-e	200	9.5	64.0		31 ~ 20
			3.0	LPW404D-3.0-e	200	14.8	107		41 ~ 27
	60	For low viscosity liquid	0.75	LPW401C-0.75-e	200/220	3.8/3.8	18.1/19.9	100 ~ 300	15 ~ 8
				LPW401C-0.75-7W	208/230/460	4.0/3.9/2.0	33.9/38.0/19.0		
			1.5	LPW402C-1.5-e	200/220	6.5/6.0	38.0/42.0		30 ~ 15
				LPW402C-1.5-7W	208/230/460	6.5/6.0/3.1	47.3/52.0/26.0		
			2.2	LPW403C-2.2-e	200/220	9.0/8.4	54.0/59.0		45 ~ 23
				LPW403C-2.2-7W	208/230/460	8.9/8.5/4.3	74.8/83.0/41.5		
			3.0	LPW404C-3.0-e	200/220	13.0/13.0	88.0/97.0		64 ~ 32
				LPW404C-3.0-7W	208/230/460	12.5/11.8/6.0	119.4/130/65.0		
		For high-viscosity liquid	1.5	LPW401D-1.5-e	200/220	6.5/6.0	38.0/42.0	60 ~ 200	14 ~ 8
				LPW401D-1.5-7W	208/230/460	6.5/6.0/3.1	47.3/52.0/26.0		
			2.2	LPW402D-2.2-e	200/220	9.0/8.4	54.0/59.0		30 ~ 16
				LPW402D-2.2-7W	208/230/460	8.9/8.5/4.3	74.8/83.0/41.5		

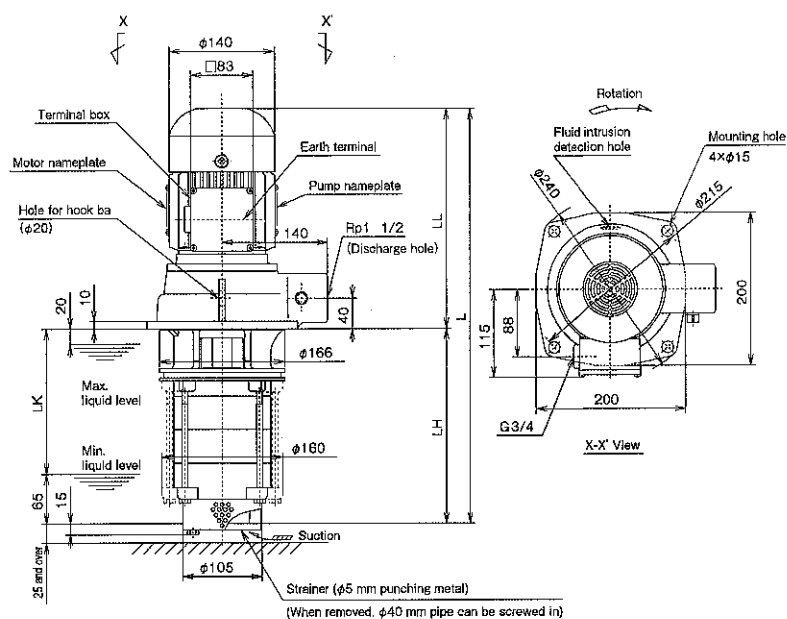
Note 1) The discharge rate and total head values were obtained in tests with kinematic viscosity of 1 mm²/s (the same as tap water at normal temperature).

Note 2) The rated current in the above table (current value listed on the pump nameplate) is the recommended current value setting of the protection unit.

Note 3) Please contact us for -G/GS type high viscosity liquids.

■ Dimensional outline drawing

● LPW40-e/G/GS



■ Dimensions

● LPW40-e/G/GS

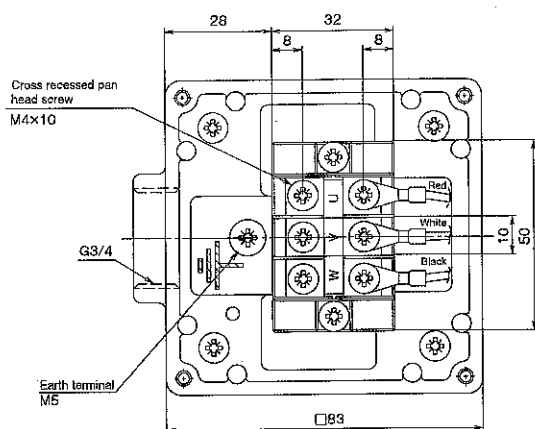
(Unit : mm)

Bore	Used liquids	Frequency (Hz)	Type	D	KB	KC	KE	KL	L	LH	LK	LL	Approx. mass(kg)
40	For low viscosity	50/60	LPW401C-0.75-e	140	102	143	88	115	543	255	190	288	28
			LPW402C-1.5-e	175	106	146	103	130	588	255	190	333	35
			LPW403C-2.2-e	175	106	146	103	130	588	255	190	333	42
			LPW404C-3.0-e	195	108	148	113	140	663	299	234	364	49
	For high viscosity	50	LPW401C-0.75-G (GS)	140	102	143	88	115	543	255	190	288	33
			LPW402C-1.5-G (GS)	175	102	143	103	130	588	255	190	333	37
			LPW403C-2.2-G (GS)	175	102	143	103	130	588	255	190	333	45
			LPW404C-3.0-G (GS)	195	103	145	113	140	663	299	234	364	57
		60	LPW401D-0.75-e	140	102	143	88	115	543	255	190	288	28
			LPW402D-1.5-e	175	106	146	103	130	588	255	190	333	35
			LPW403D-2.2-e	175	106	146	103	130	588	255	190	333	42
			LPW404D-3.0-e	195	108	148	113	140	663	299	234	364	49

Detailed drawing of the terminal box

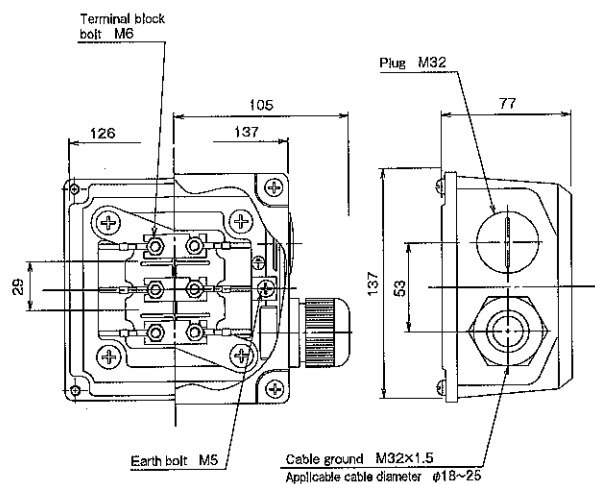
● LPW40-e, LPW50-e

■ Dimensional outline drawing



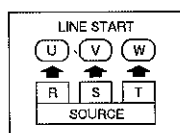
● LPW65-e

■ Dimensional outline drawing



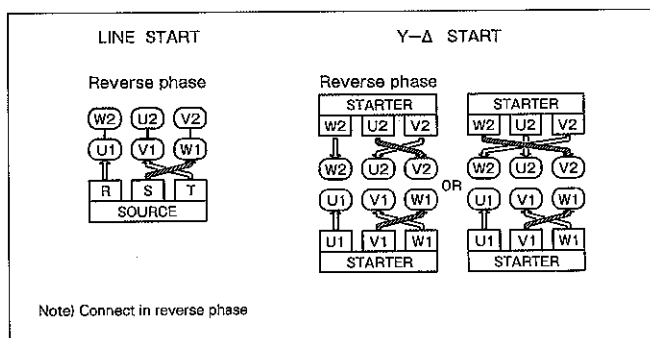
● LPW40-e, LPW50-e

■ Connection diagram



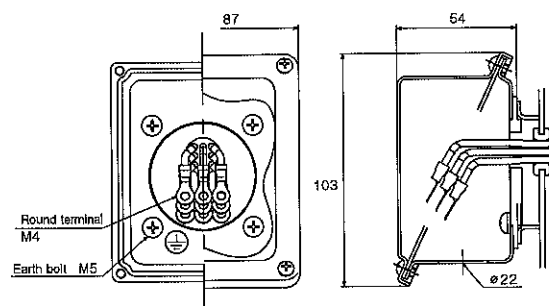
● LPW65-e

■ Connection diagram



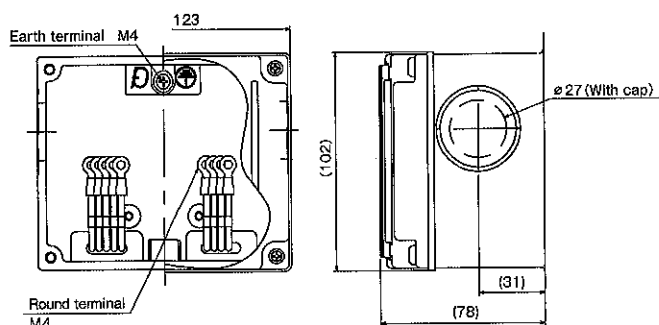
● LPW-7W 0.75kW

■ Dimensional outline drawing



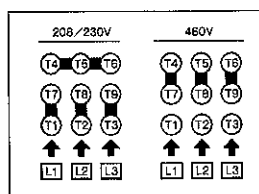
● LPW-7W 1.5kW and above

■ Dimensional outline drawing



● LPW-7W Full output

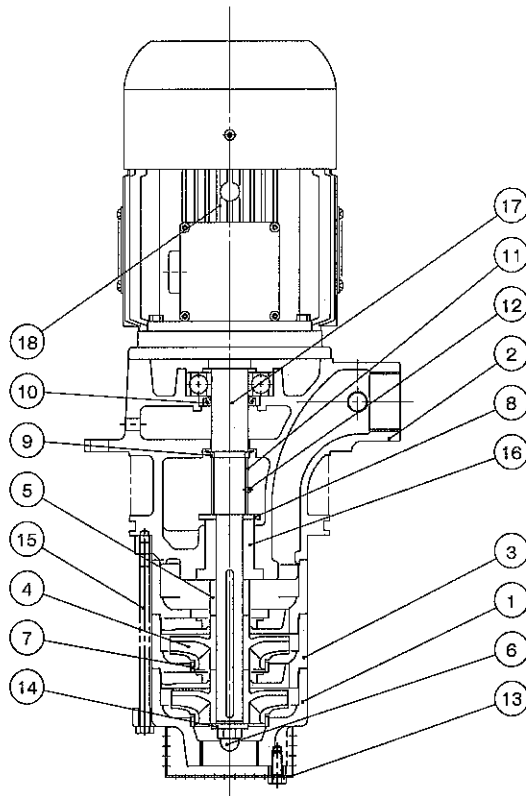
■ Connection diagram



※ Please contact us for -G/GS type.

Sectional drawing

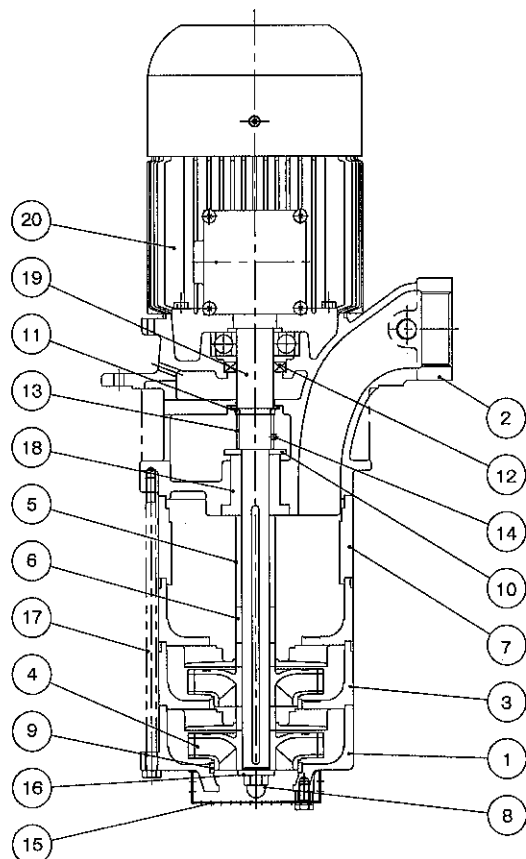
●LPW40



No.	Part Name	Qty	Material
1	Suction casing	1	FC200
2	Discharge casing	1	FC200
3	Intermediate casing	2	FC200
4	Impeller	2	FCD450
5	Shaft spacer	1	STS
6	Impeller nut	1	SUS304
7	Wearing ring	2	SUS304
8	Deflector	1	SS400
9	Deflector	1	NBR
10	Oil seal	1	NBR
11	Collar	1	STKM
12	Hexagon socket set screw	1	SCM435
13	Strainer	1	SPCC
14	Washer	1	SUS420J1
15	Tie bolt	4	SS400
16	Shaft sleeve	1	FCD450
17	Shaft	1	S35C
18	Motor	1	

Applicable models : LPW402C-1.5-□, LPW402D-1.5-□, LPW402D-2.2-□

●LPW50-ZL



No.	Part Name	Qty	Material
1	Suction casing	1	FC200
2	Discharge casing	1	FC200
3	Intermediate casing	2	FC200
4	Impeller	2	FCD450
5	Shaft spacer	1	STS
6	Shaft spacer	1	STS
7	Intermediate spacer	1	STKM13A
8	Impeller nut	1	SUS304
9	Wearing ring	2	SUS304
10	Deflector	1	SS400
11	Deflector	1	NBR
12	Oil seal	1	NBR
13	Collar	1	STKM
14	Hexagon socket set screw	1	SCM435
15	Strainer	1	SS400
16	Washer	1	SUS420J1
17	Tie bolt	4	SS400
18	Shaft sleeve	1	FCD450
19	Shaft	1	S35C
20	Motor	1	