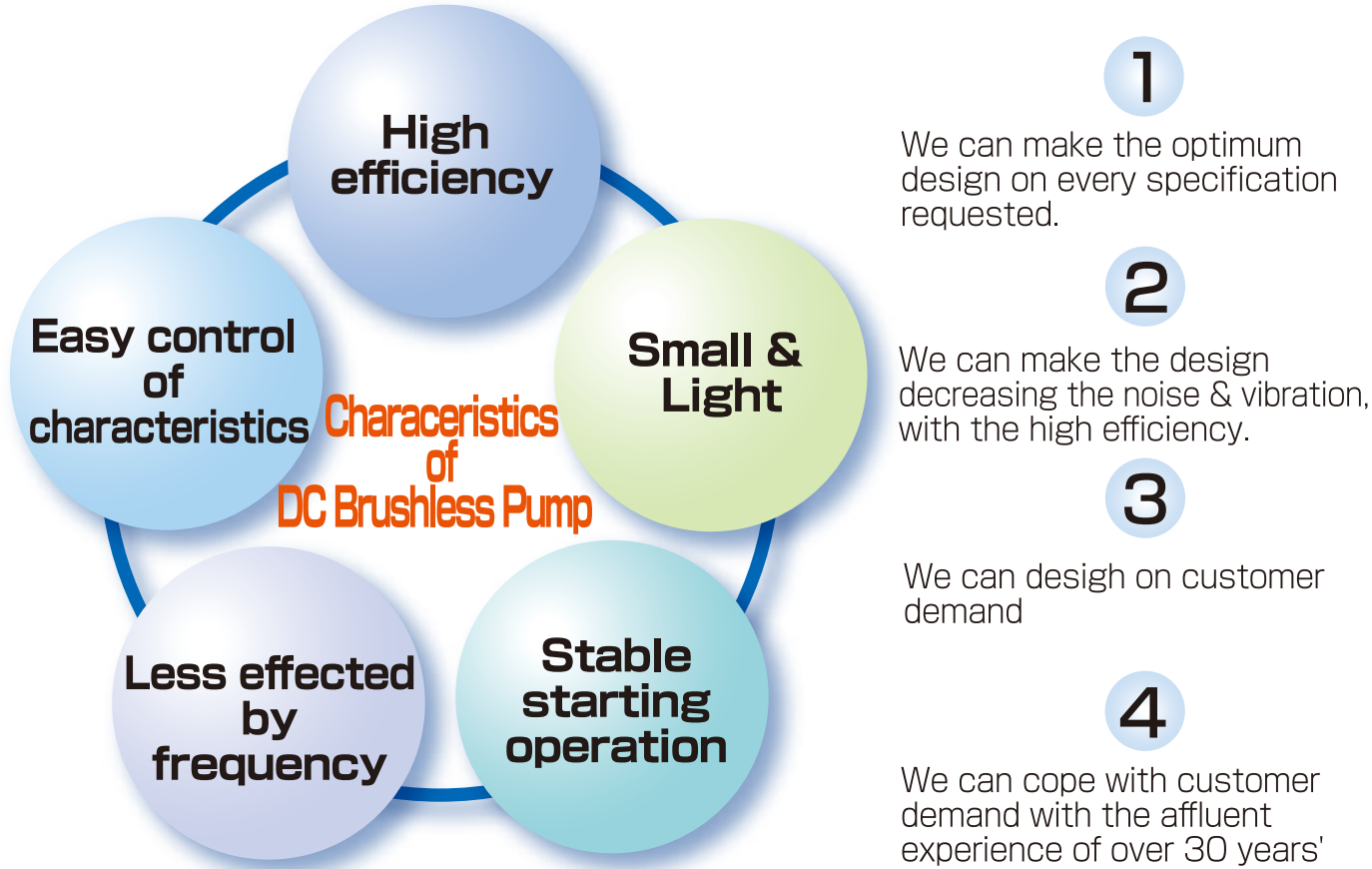


Create the life DC Brushless Pump

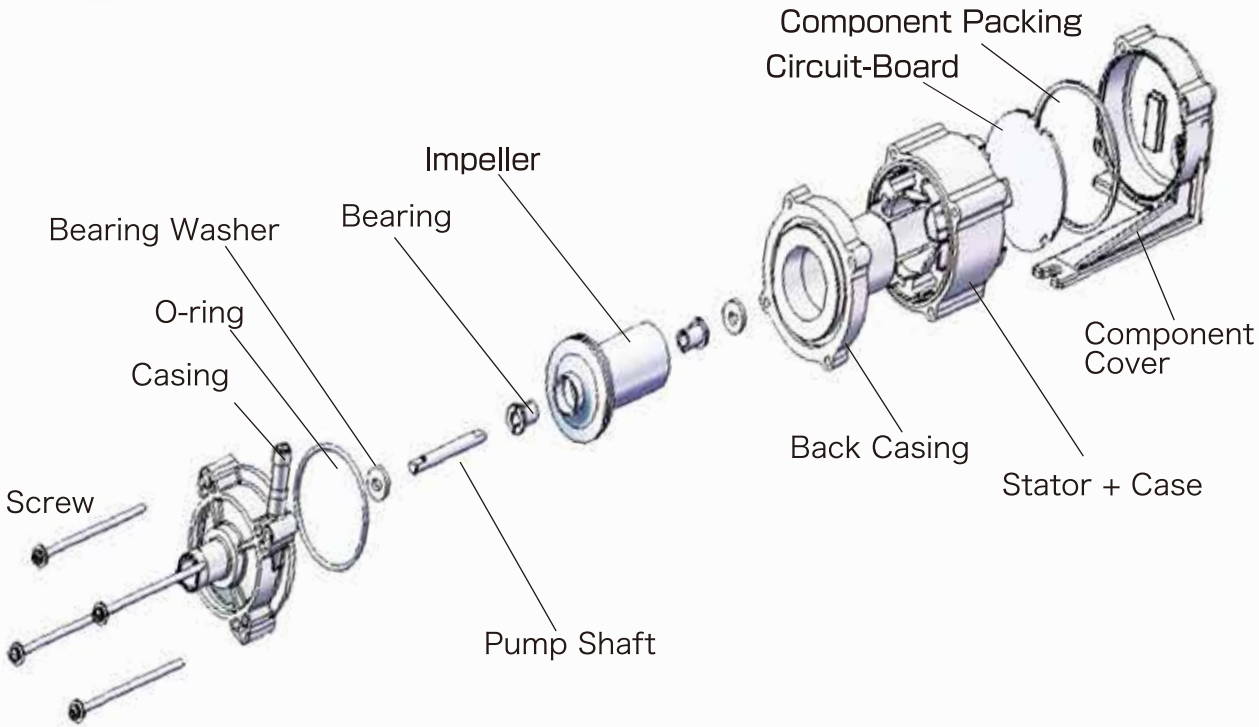


List of Model

Representative Model Name	Characteristics	Rated Output	Power Source	Range of liquid temp.	Material of flow passage					
					Casing,	Back Casing	Impeller	O-Ring	Shaft	Bearing
PD-051	2m-5.5L/m	4W	24V	0~60℃	PPE	PPS	PP	EPDM•FKM	Ceramic	Carbon Teflon
PDH-054	14.4m-2L/m	25W	24V	0~60℃	PPE	PPS	PP	EPDM•FKM	Ceramic	Carbon Teflon
PD-055	4.7m-10L/m	16W	24V	0~60℃	PPE	PPS	PP	EPDM•FKM	Ceramic	Carbon Teflon
PD-22	4.3m-6L/m	11W	282V	0~80℃	PPS	PPS	PPE	EPDM	Ceramic	Carbon
PD-51	17.1m-15L/m	110W	24V	0~60℃	PPS	PPS	PPS	EPDM•FKM	Ceramic	Carbon
	23.2m-15L/m	150W	48V							
PD-103	5.8m-90L/m	145W	1φ 200V 3φ 200V	0~60℃	PPS	PPS	PPS	EPDM•FKM	Ceramic	Carbon
PDS-72	5.6m-20L/m	50W	141V	0~45℃	PPE	PPE	PPE	EPDM	Ceramic	Carbon
PDH-403	32m-30L/m	400W	3φ 200V	0~120℃	SCS13	SCS13 SUS316 SUS304	SUS304	FKM	Ceramic	Ceramic
PDH-752	40m-40L/m	750W	3φ 200V	0~120℃	SCS13	SUS316	SUS304	FKM	SIC	SIC

※Above models are representative. Customer design is possible, dependent on conditions & usage. Contact us.
※Model & Specification is out of guarantee. Change of specification is subject to revision & change.

Structure drawing(PDH-054 Model)



Internal structure PDH-752 Model

Motor Structure

Motor is filled with Inert gas N2 for preventing dew condensation

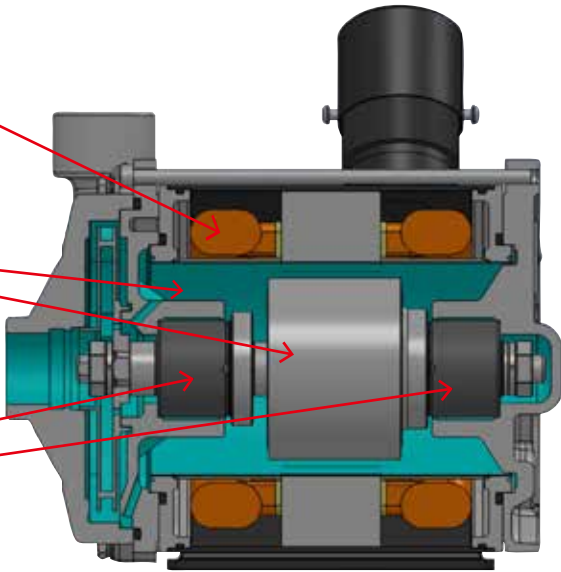
Rotor

Large gap between the stator winding and the rotor
Rare-earth magnets

Wetted parts Material

Stainless steel, SIC, Fluoro-Rubber

SIC Bearing



→ Long life & high reliability
→ No contamination or Impurities in the liquid

DC Brushless Pump
PD-051



Application

- ◆ **Medical Equipment:**
Biochemistry Analyzers, cooling systems,
- ◆ **Physical and Chemical analysis:** Thermoregulator, Water Purification Systems
- ◆ **Semiconductors:**
semiconductor cooling systems
- ◆ **Surface treatment:**
Plating equipments
- ◆ **Beverage Equipment:**
Dispensers



PD-051

DC Brushless Pump
PDH-054



Application

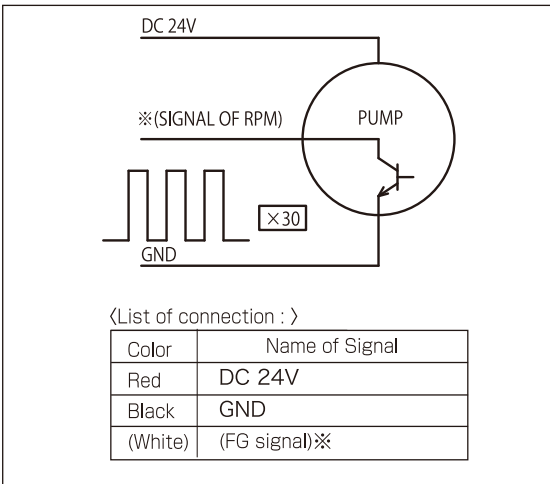
- ◆ **Medical Equipment:**
Biochemistry Analyzer, Cooling systems, Laser treatment cooling devices, Laser therapy apparatus
- ◆ **Physical and Chemical analysis:** Thermoregulator, Water Purification Systems
- ◆ **Semiconductors:**
Semiconductor cooling systems
- ◆ **Surface treatment:**
Plating equipments
- ◆ **Beverage Equipment:**
Dispensers



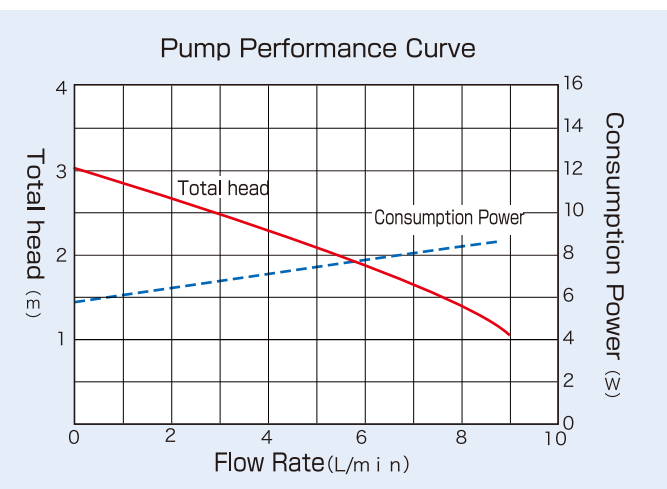
PDH-054

Wiring Diagram

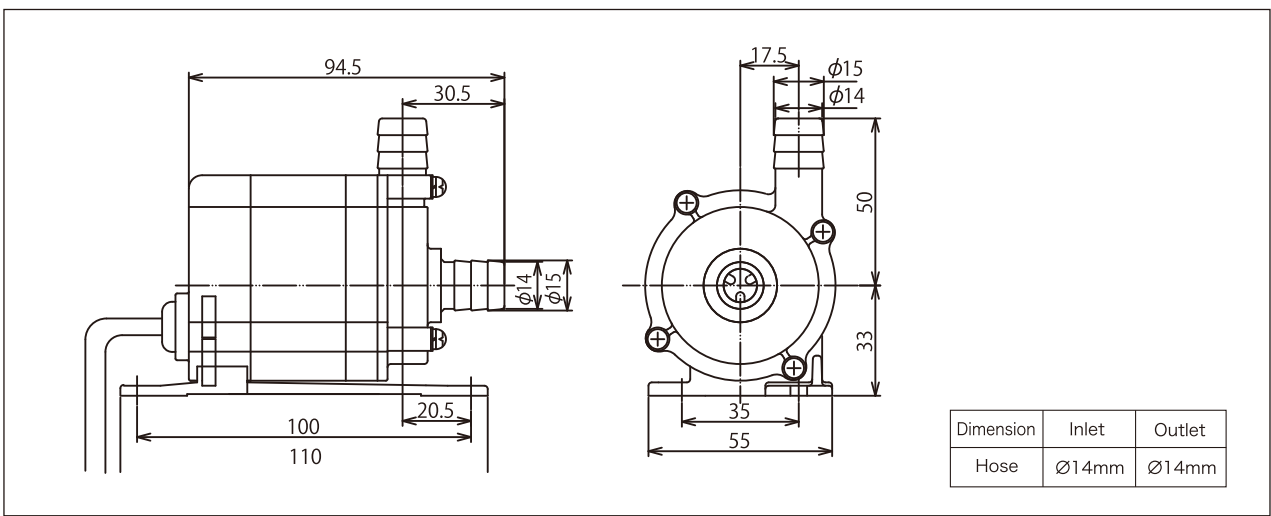
※Standard is without FG signal.



Characteristics



Outline Dimension



Specification

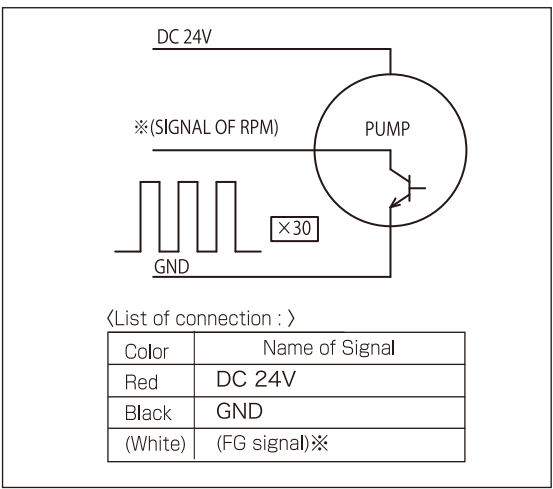
Item	Rated Output of Motor	Rated Voltage	Flow Rate	Head	Rated Consumption Power	Vibration	Noise	Weight of Product
Model Name	W	V	L /min	m	W	μ m	dB(A)	kg
PD-051	4	24	5.5	2	7.2	Less Than 20	Less Than 40	0.4

■Range of Ambient Temperature : 0~40℃ ■Range of Liquid TemperatureFlow Rate : 0~60℃ ■Location to be set : Indoors

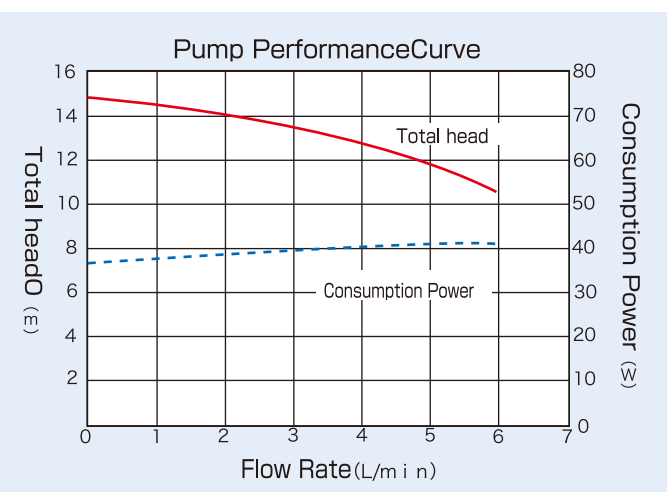
Base Prodcut : PD-051PEB-24A (Hose)

Wiring Diagram

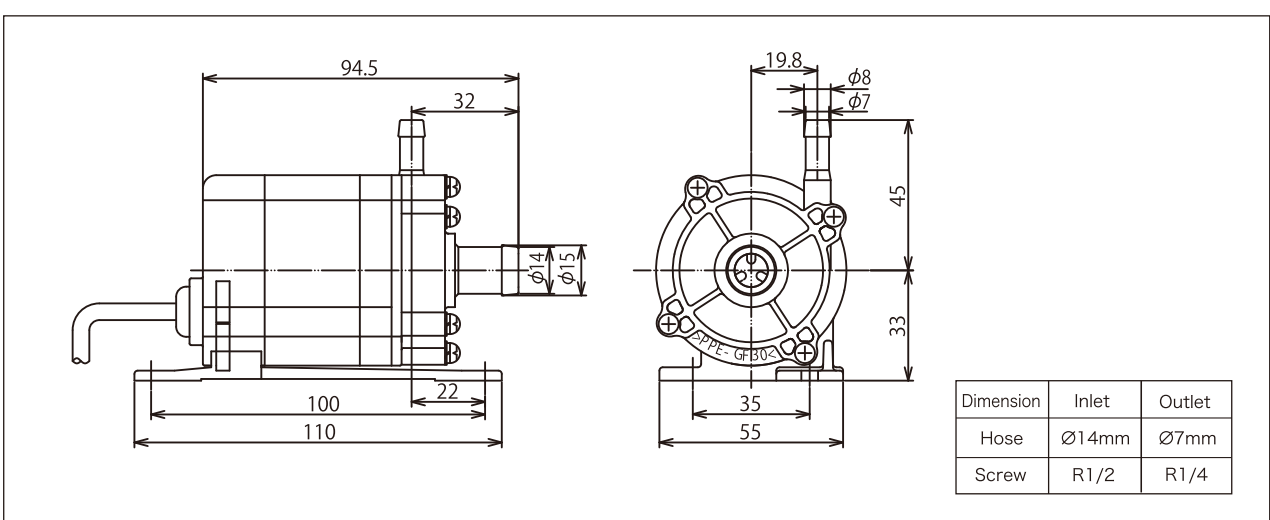
※Standard is without FG signal.



Characteristics



Outline Dimension



Specification

Item	Rated Output of Motor	Rated Voltage	Flow Rate	Head	Rated Consumption Power	Vibration	Noise	Weight of Product
Model Name	W	V	L /min	m	W	μ m	dB(A)	kg
PD-054	25	24	2	14.4	37	Less Than 25	Less Than 45	0.4

■Range of Ambient Temperature : 0~50℃ ■Range of Liquid TemperatureFlow Rate : 0~60℃ ■Location to be set : Indoors

Base Prodcut : PDH-054 CEA/CEQ-24A (Hose/Screw)

DC Brushless Pump
PD-055

Application

- ◆ **Medical Equipment:**
Biochemistry Analyzer,
cooling system, Endoscope
reprocessor,
- ◆ **Physical and Chemical
analysis:** Thermoregulator,
Water Purification Systems
- ◆ **Semiconductors:**
semiconductor cooling
system
- ◆ **Photo:** photo, X-ray and
dental film processors;
- ◆ **Beverage Equipment:**
Dispensers



PD-055

DC Brushless Pump
PD-22

Application

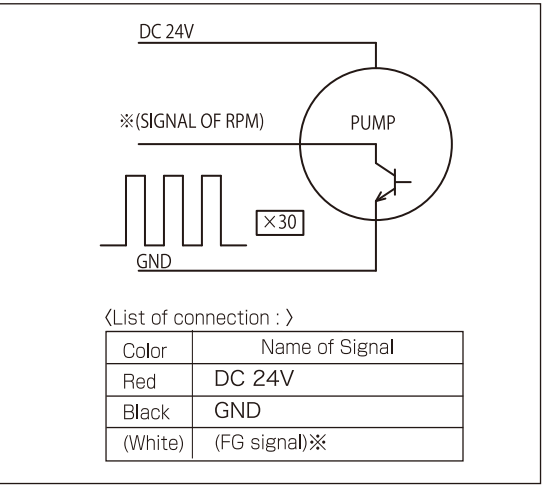
- ◆ **Housing Facility :**
Hot water heater, solar
collector



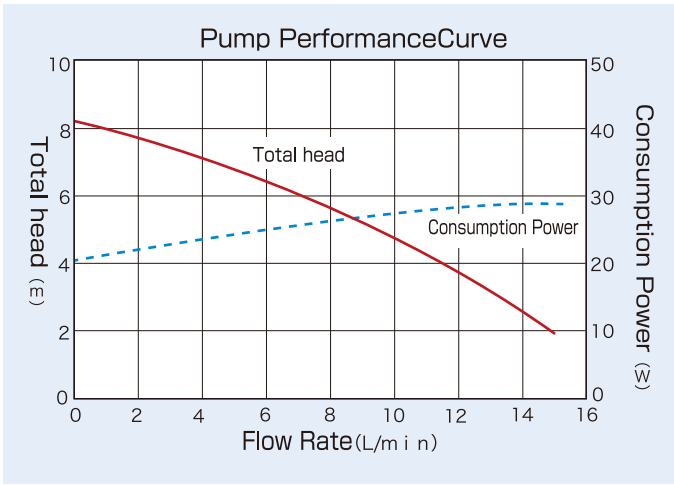
PD-22

Wiring Diagram

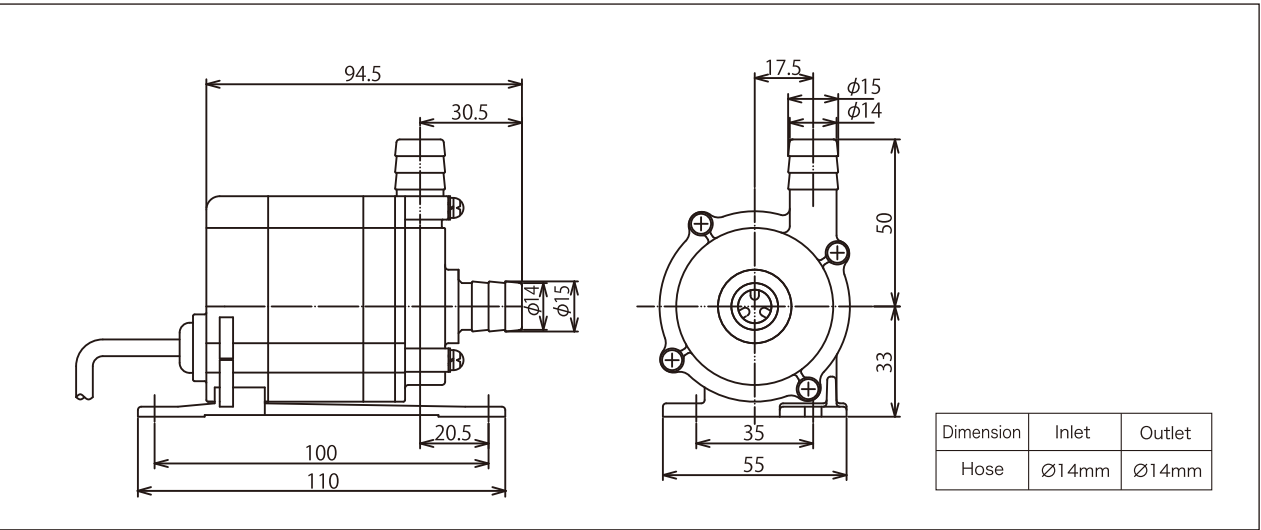
※Standard is without FG signal.



Characteristics



Outline Dimension



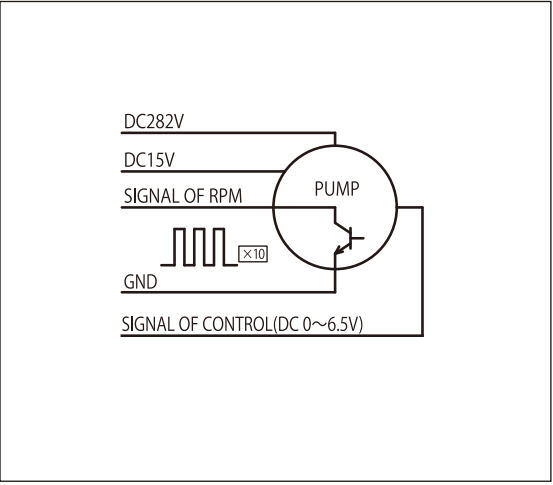
Specification

Item	Rated Output of Motor	Rated Voltage	Flow Rate	Head	Rated Consumption Power	Vibration	Noise	Weight of Product
Model Name	W	V	L/min	m	W	μm	dB(A)	kg
PD-055	16	24	10	4.7	27	Less Than 25	Less Than 45	0.4

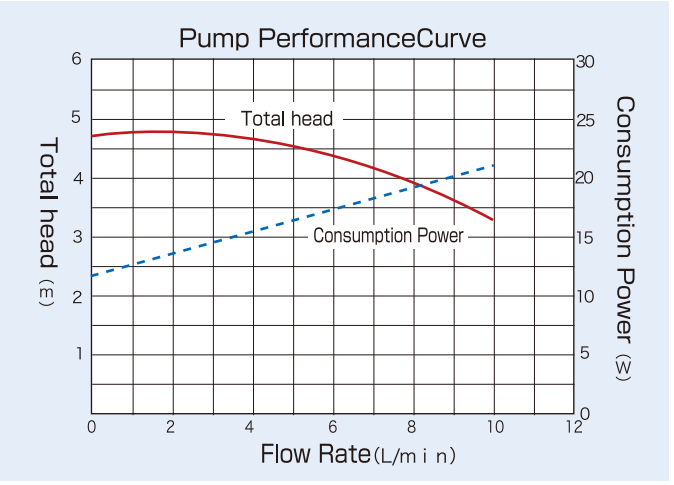
■Range of Ambient Temperature : 0~40°C ■Range of Liquid TemperatureFlow Rate : 0~60°C ■Location to be set : Indoors

Base Prodcut : PD-055CEB-24A (Hose)

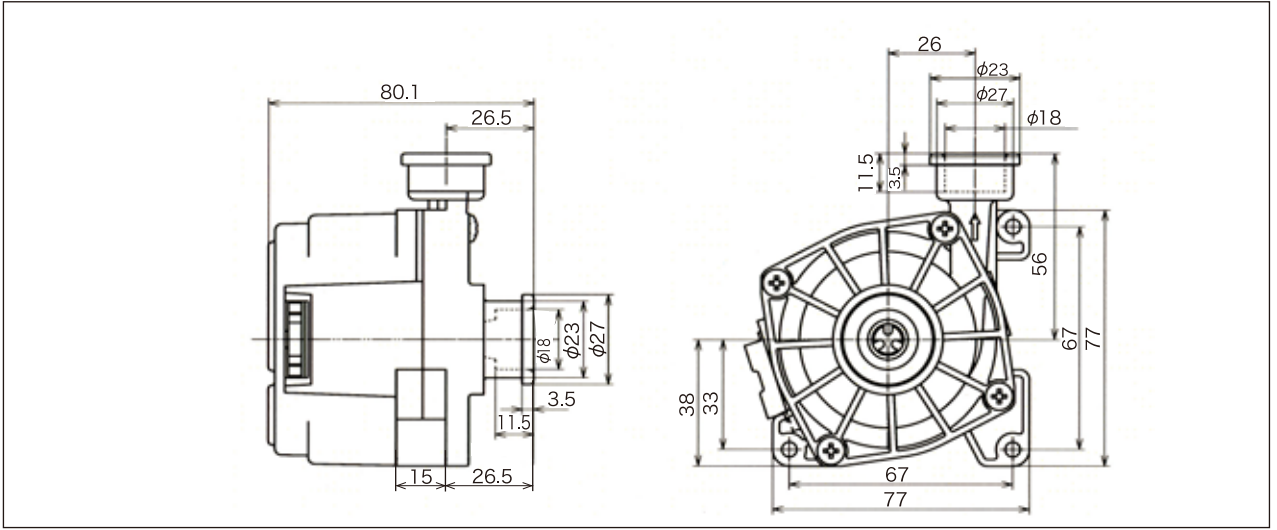
Wiring Diagram



Characteristics



Outline Dimension



Specification

Item	Rated Output of Motor	Rated Voltage	Flow Rate	Head	Rated Consumption Power	Vibration	Noise	Weight of Product
Model Name	W	V	L/min	m	W	μm	dB(A)	kg
PD-22	11	282	6	4.3	17.2	Less Than 15	Less Than 38	0.54

■Range of Ambient Temperature : 0~50°C ■Range of Liquid TemperatureFlow Rate : 0~80°C ■Location to be set : Indoors

DC Brushless Pump PD-51

Application

◆ Medical Equipment:

Biochemistry Analyzer,
Cooling system, Laser
treatment cooling device,
Endoscope reprocessors

◆ **Physical and Chemical
analysis:** Thermoregulator,
Water Purification Systems

◆ Housing Facility:

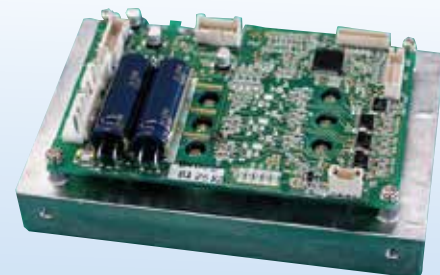
Bubble bath device

◆ Semiconductors:

Semiconductor cooling
system



PD-51

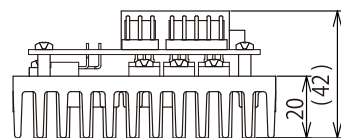
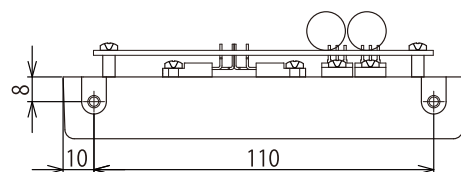
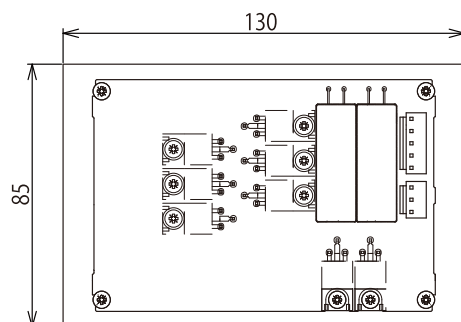


Drive circuit

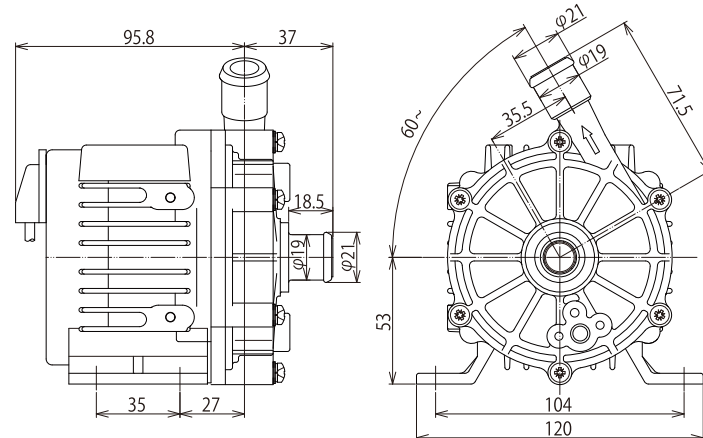
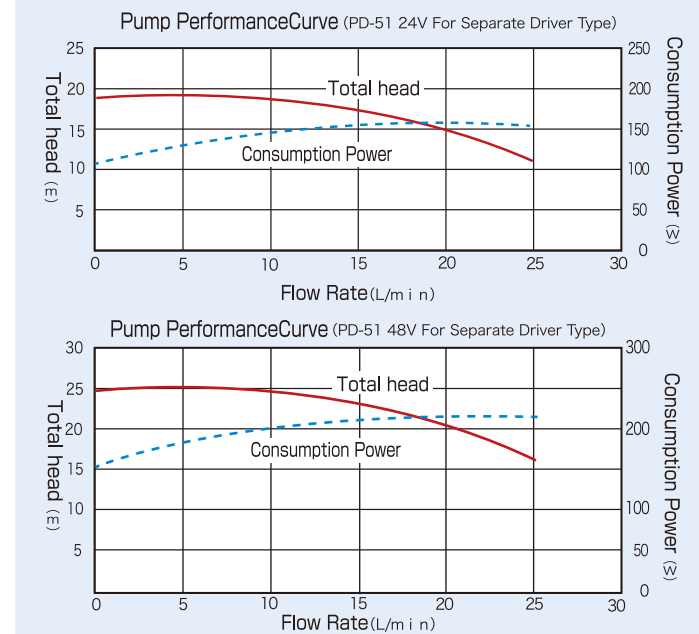
Characteristics

Exclusive driver is necessary
for the operation of pump.
Contact us.

Outline Dimension



Dimension	Inlet	Outlet
Hose	Ø19mm	Ø19mm
Screw	G3/4	G3/4



Specification

Item	Rated Output of Motor	Rated Voltage	Flow Rate	Head	Rated Consumption Power	Vibration	Noise	Weight of Product
Model Name	W	V	L/min	m	W	μm	dB(A)	kg
PD-51	110/150	24/48	15/15	17.1/23.2	155/215	Less Than 25	Less Than 55	2.0

■Range of Ambient Temperature : 0~50°C ■Range of Liquid TemperatureFlow Rate : 0~60°C ■Location to be set : Indoors and inside machine

Base Product : PD-51CED-24B/48B (Hose) PD-51CEM-24B/48B (Screw)

DC Brushless Pump PD-103 DUT-10

Application

◆ Dedicated equipment. :

Water heater circulation

◆ Housing Facility :

Bubble bath device



PD-103

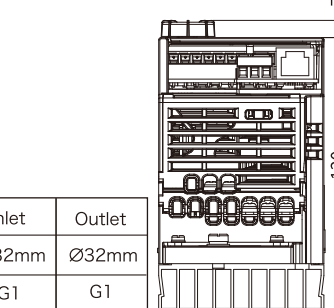
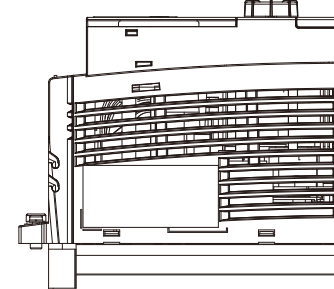
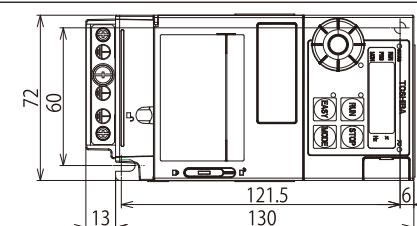


DUT-10

Characteristics

Exclusive driver is necessary
for the operation of pump.
Contact us.

Outline Dimension

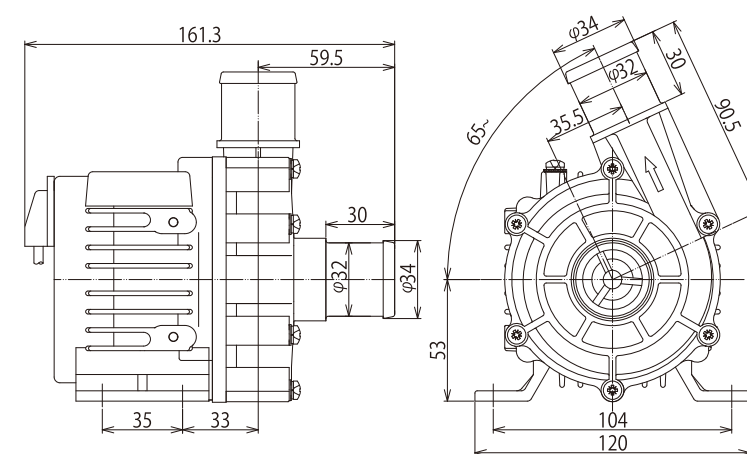
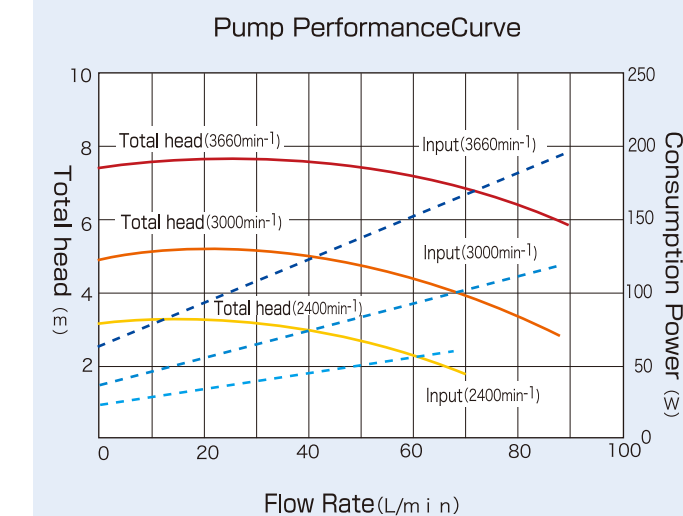


Dimension	Inlet	Outlet
Hose	Ø32mm	Ø32mm
Screw	G1	G1

Specification

Item	Rated Output of Motor	Rated Voltage	Flow Rate	Head	Rated Consumption Power	Vibration	Noise	Weight of Product
Model Name	W	V	L/min	m	W	μm	dB(A)	kg
PD-103	145	1φ200V / 3φ200V	90	5.8	196	Less Than 30	Less Than 60	1.6

■Range of Ambient Temperature : 0~40°C ■Range of Liquid TemperatureFlow Rate : 0~60°C ■Location to be set : Indoors





pump

PD-51CFM-200A
PD-51CFD-200A
PD-103PFP-200A
PD-103PFR-200A

Exclusive driver is necessary
for the operation of the
pump.
Please contact us.



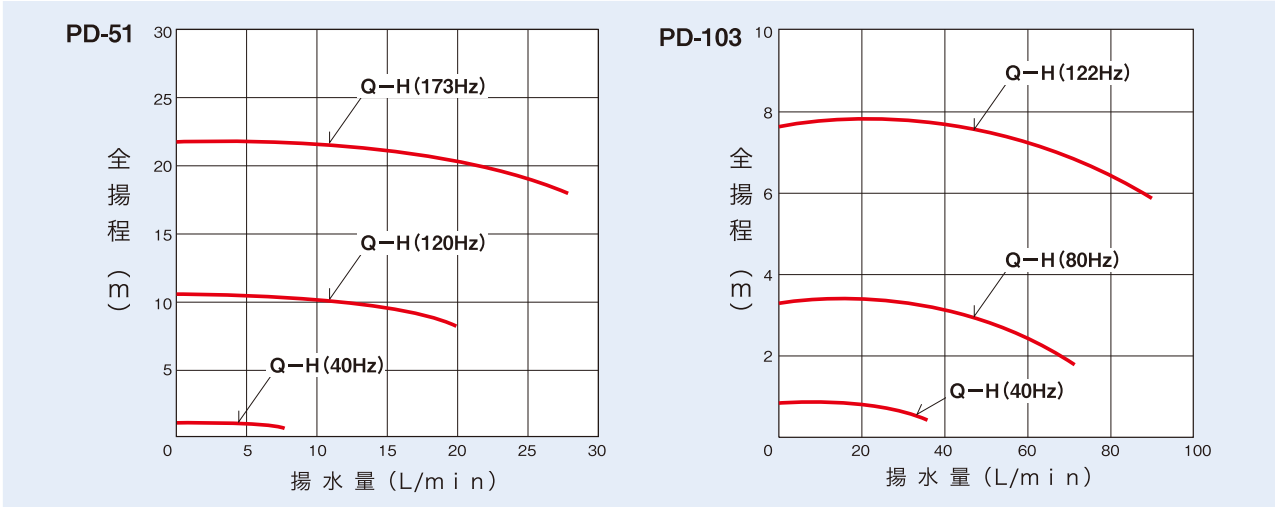
Characteristics

- High efficiency and energy saving
- Easy to control with a dedicated inverter
- Compact and lightweight
- Excellent corrosion resistance
- Long life

Application

- Coolant Circulation for water, antifreeze etc.
- A wide variety of industrial machines

特性



仕様

Item Model name	Diameter		Maximum		Rated Voltage V	Motor		Weight kg
	Hose A(mm)	Screw B(G-)	Total head m	Flow rate L / min		Rate output W	Power Consumption W	
PD-51CFD-200A	19	-	21	28	1φ200V	200	260	1.5
PD-51CFD-200A	19	-	21	28	3φ200V	200	260	1.5
PD-51CFM-200A	-	3 / 4	21	28	1φ200V	200	260	1.5
PD-51CFM-200A	-	3 / 4	21	28	3φ200V	200	260	1.5
PD-103PFR-200A	32	-	7.5	90	1φ200V	145	196	1.6
PD-103PFR-200A	32	-	7.5	90	3φ200V	145	196	1.6
PD-103PFP-200A	-	1	7.5	90	1φ200V	145	196	1.6
PD-103PFP-200A	-	1	7.5	90	3φ200V	145	196	1.6

DC Brushless Pump
PDS-72

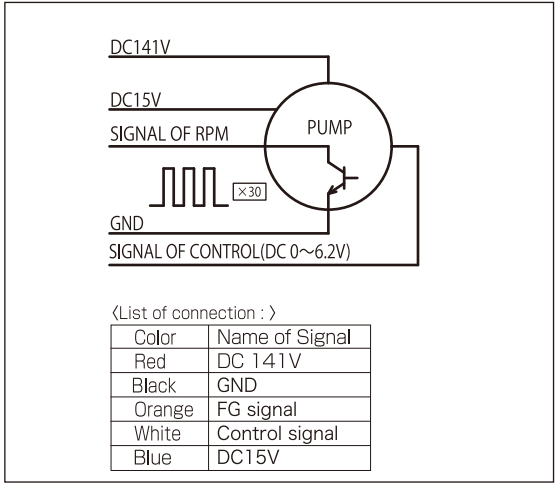


Application

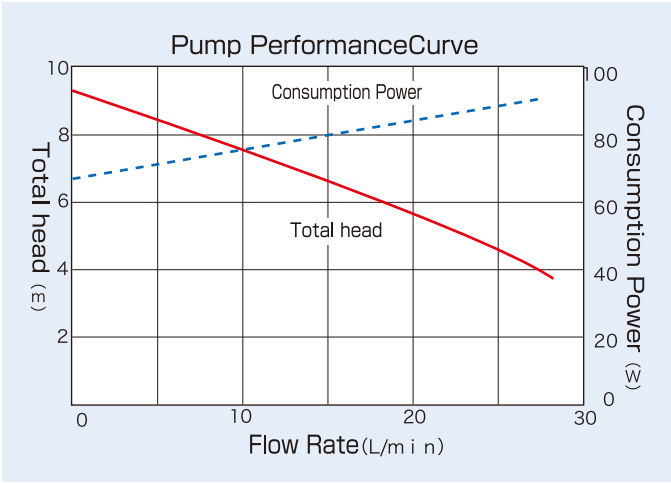
- ◆ 24 hours' Bath



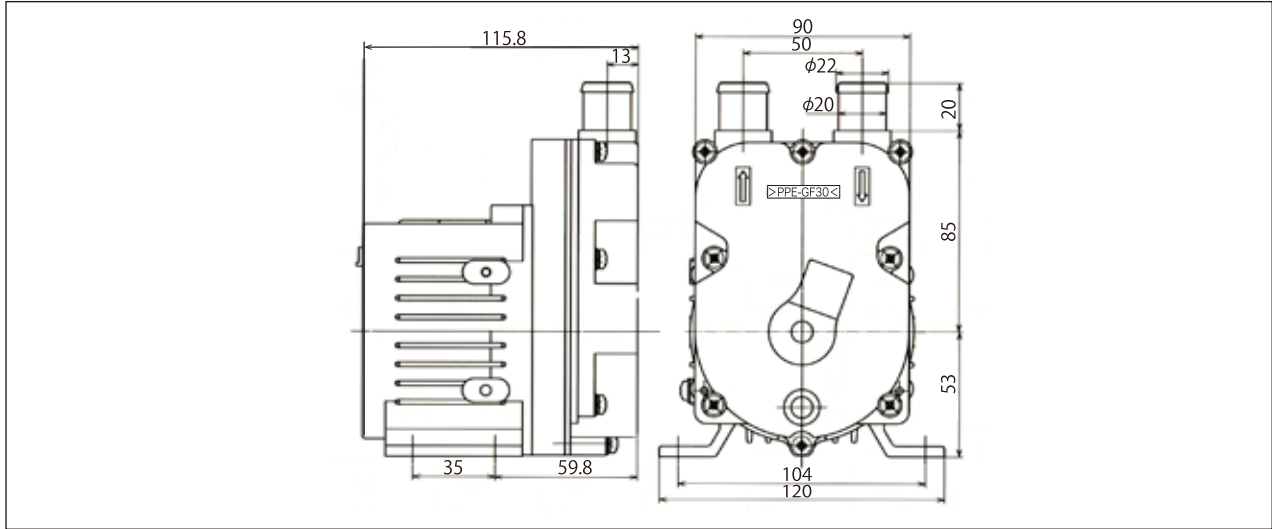
Wiring Diagram



Characteristics



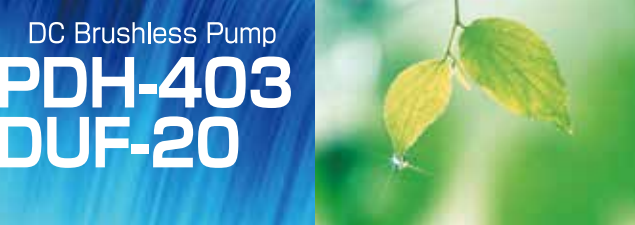
Outline Dimension



Specification

Item Model Name	Rated Output of Motor W	Rated Voltage V	Flow Rate L / min	Head m	Rated Consumption Power W	Vibration μm	Noise dB(A)	Weight of Product kg
PDS-72	50	141	20	5.6	85	Less Than 30	Less Than 43	1.7

■Range of Ambient Temperature : 0~50℃ ■Range of Liquid TemperatureFlow Rate : 0~45℃ ■Location to be set : Indoors



DC Brushless Pump

PDH-403
DUF-20

Application

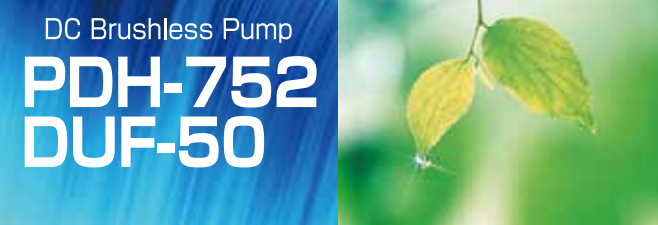
- ◆ **Semiconductors:**
Semiconductor cooling system
- ◆ **Broadcast facility:**
Cooling Equipment



PDH-403



DUF-20



DC Brushless Pump

PDH-752
DUF-50

Application

- ◆ **Semiconductors:**
Semiconductor cooling system
- ◆ **Broadcast facility:**
Cooling Equipment



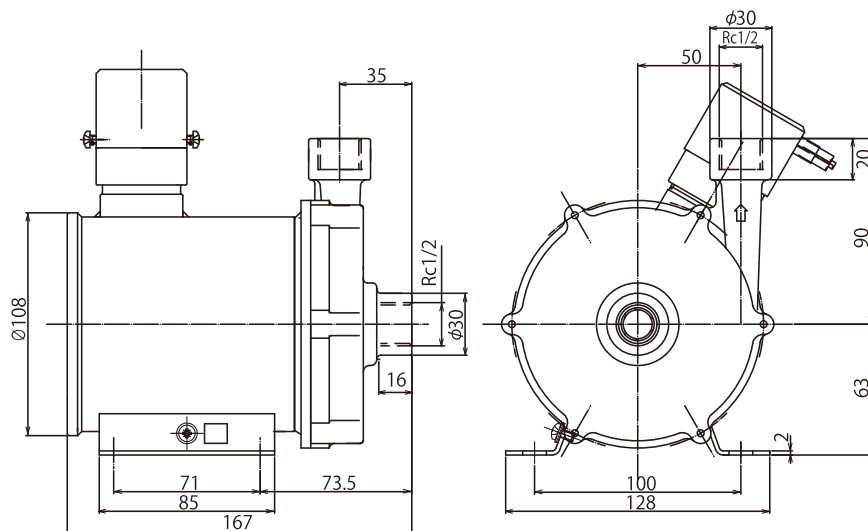
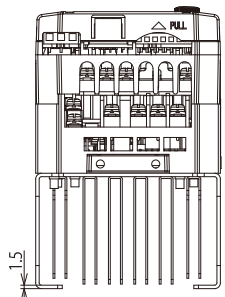
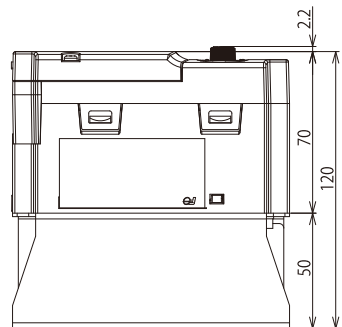
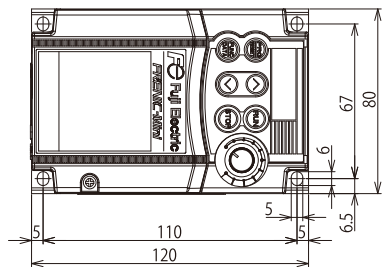
PDH-752



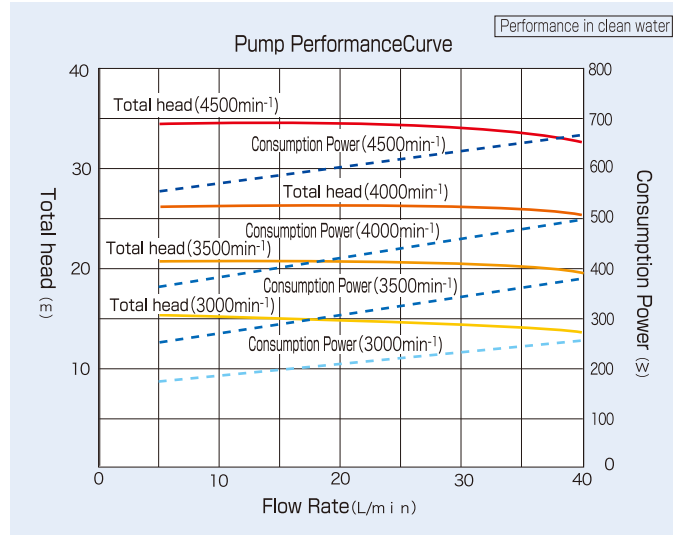
DUF-50

Exclusive driver is necessary for the operation of pump.
Contact us.

Outline Dimension



Characteristics



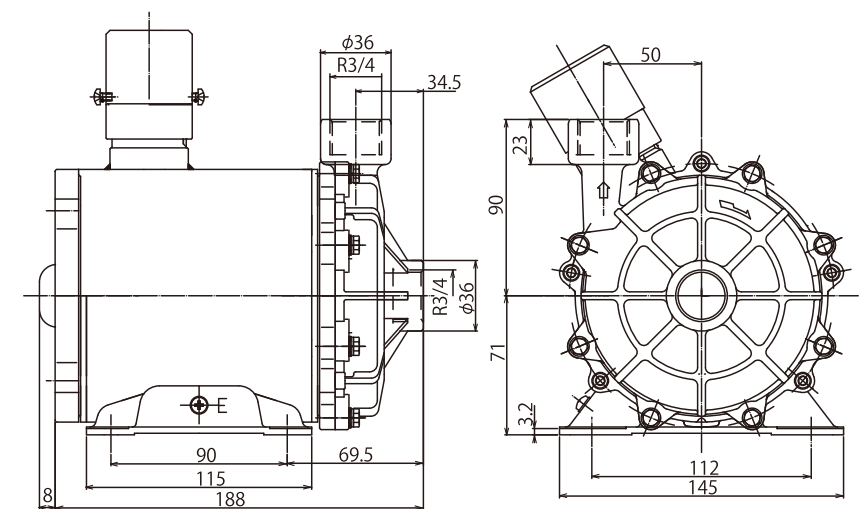
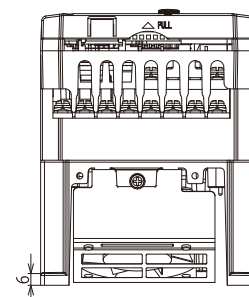
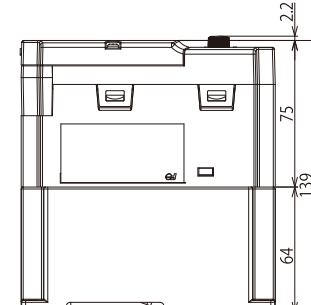
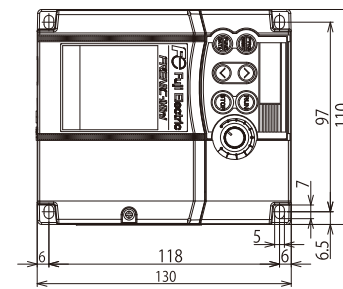
Specification

Item	Rated Output of Motor	Rated Voltage	Flow Rate	Head	Rated Consumption Power	Vibration	Noise	Weight of Product
Model Name	W	V	L/min	m	W	μm	dB(A)	kg
PDH-403	400	3 φ 200V	30	32	700	Less Than 20	Less Than 65	6.4

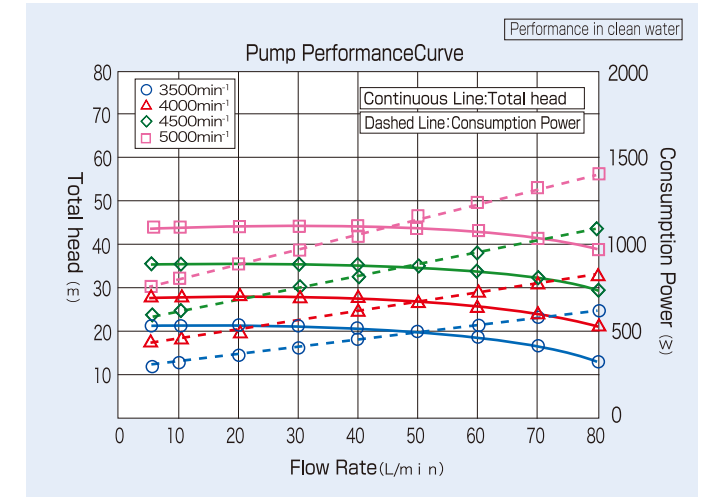
■Range of Ambient Temperature : 0~50°C ■Range of Liquid TemperatureFlow Rate : 0~120°C ■Location to be set : Indoors

Exclusive driver is necessary for the operation of pump.
Contact us.

Outline Dimension



Characteristics



Specification

Item	Rated Output of Motor	Rated Voltage	Flow Rate	Head	Rated Consumption Power	Vibration	Noise	Weight of Product
Model Name	W	V	L/min	m	W	μm	dB(A)	kg
PDH-752	750	3 φ 200V	40	40	1100	Less Than 20	Less Than 60	10.8

■Range of Ambient Temperature:0~50°C■Range of Liquid TemperatureFlow Rate:0~120°C■Location to be set : Indoors■Sensorless Driving Type