

GLOBAL PUMP SOLUTION DOOCH

60Hz



• DHF(T)



• DHM

# HORIZONTAL MULTI/SINGLESTAGE PUMP

DHF(T), DHM SERIES

# DHF(T) SERIES

Horizontal Multistage pump

## DHF(T) 60Hz

STAINLESS STEEL HORIZONTAL MULTISTAGE PUMP



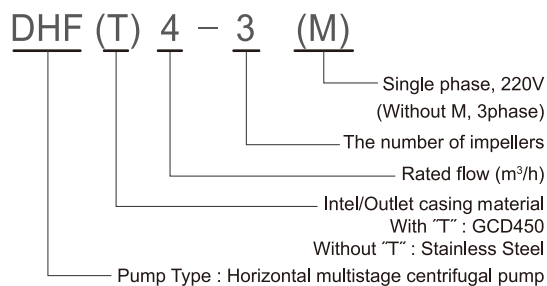
### Feature

DHF(T) are non-self priming, horizontal and multistage pump. The DHF pump are designed for the needs of commercial and industrial application. The DHF pumps consist of mechanical seal, shaft and axial suction, radial discharge. The material of wet parts is stainless steel that prevents corrosion.

### Application

- Pressure boosting system
- Water treatment
- Cooling system
- Irrigation system
- Sprinkler system
- Industrial water supply system

### Definition of Model



### Pumped Liquid

Clean, thin, non-flammable and explosive, not containing the liquid with solid particle and fiber

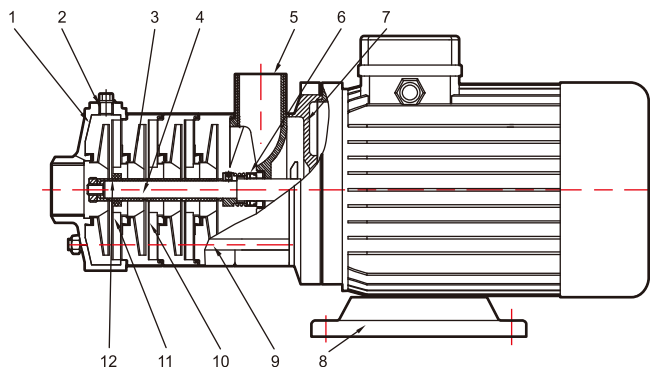
### Installation Requirement

- The pump shall be fastened on a stable horizontal base
- The installation of the pump shall ensure that the pump will not be forced by the tension of the pipeline
- The pump shall be installed on the ventilating and anti-freezing location
- Electric wiring device shall guarantee that the pump will not be damaged by lack of phase, unstable voltage, current leakage and overload

### Motor specification

Motor type : TEFC  
 Protection class : IP54  
 Insulation class : F  
 Standard voltage : 3 phase 220V/380V, 60Hz  
 Single phase 220V, 60Hz

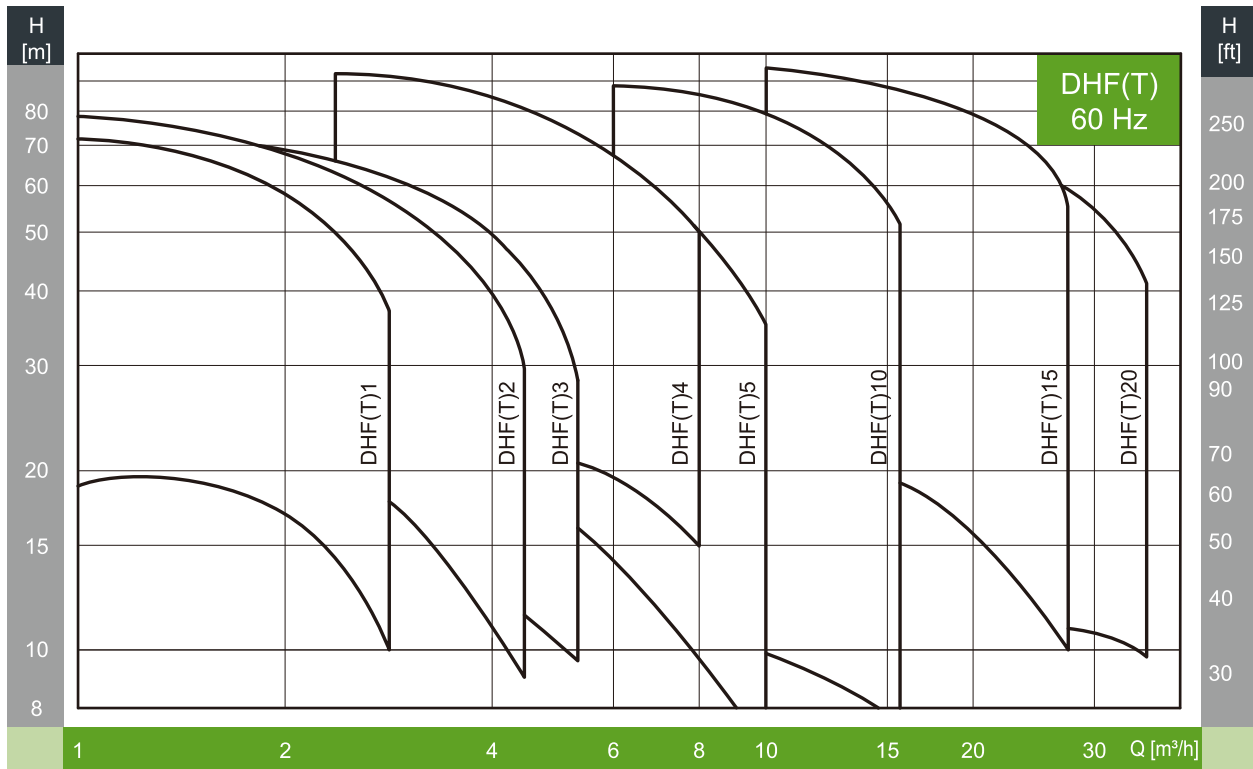
### Sectional Drawing



### Material

NO.	PART	MATERIAL	AISI/ASTM
1	Suction casing(DHF)	Stainless steel	CF 8 (AISI304)
	Suction casing(DHFT)	GCD450	A395
2	Air release valve	Stainless steel	AISI304
3	Impeller	Stainless steel	AISI304
4	Shaft	Stainless steel	AISI304
5	Discharge casing(DHF)	Stainless steel	CF 8 (AISI304)
	Discharge casing(DHFT)	GCD450	A395
6	Mechanical Seal	SIC/CARBON/VITON	
7	Motor flange	Aluminum alloy	
8	Base	Steel	AISI1015
9	Bolt	Stainless steel	AISI304
10	Diffuser	Stainless steel	AISI304
11	Support Diffuser	Stainless steel	AISI304
12	Sleeve	Stainless steel	AISI304

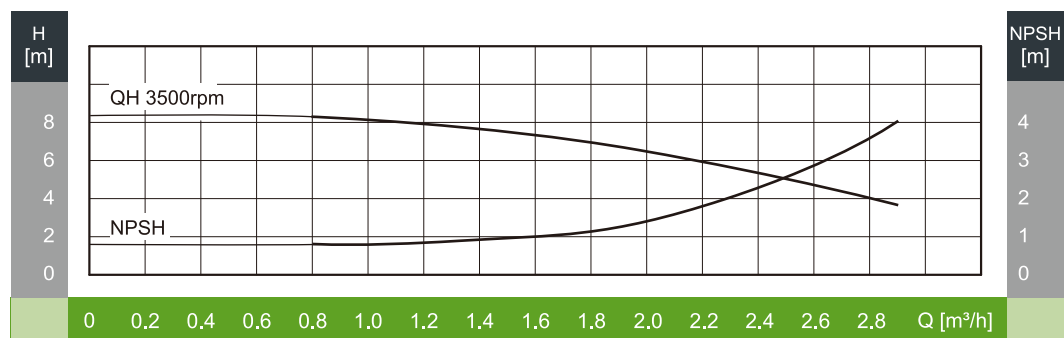
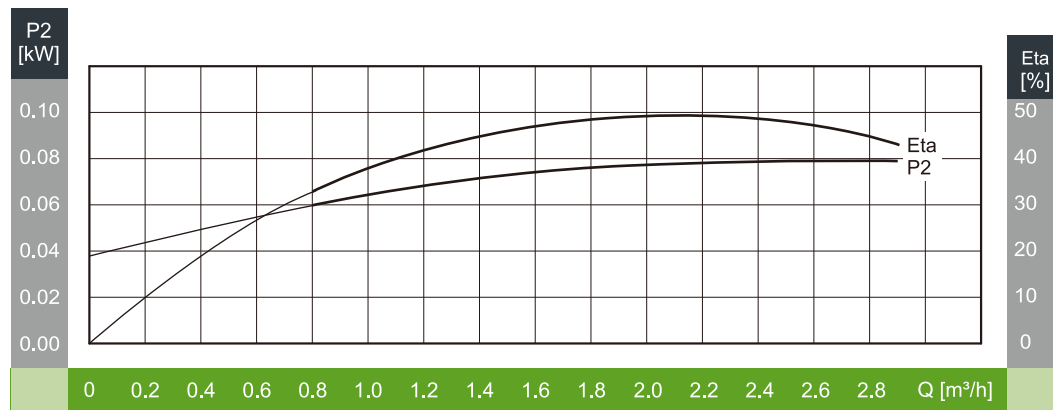
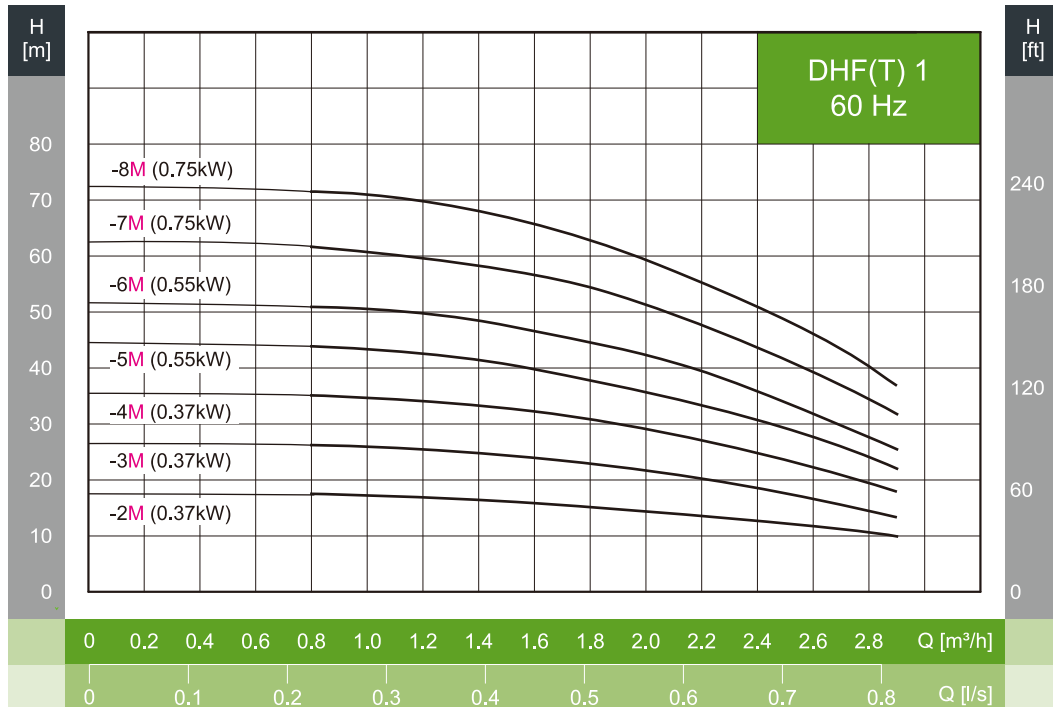
### Performance Range (60Hz)



### Specification

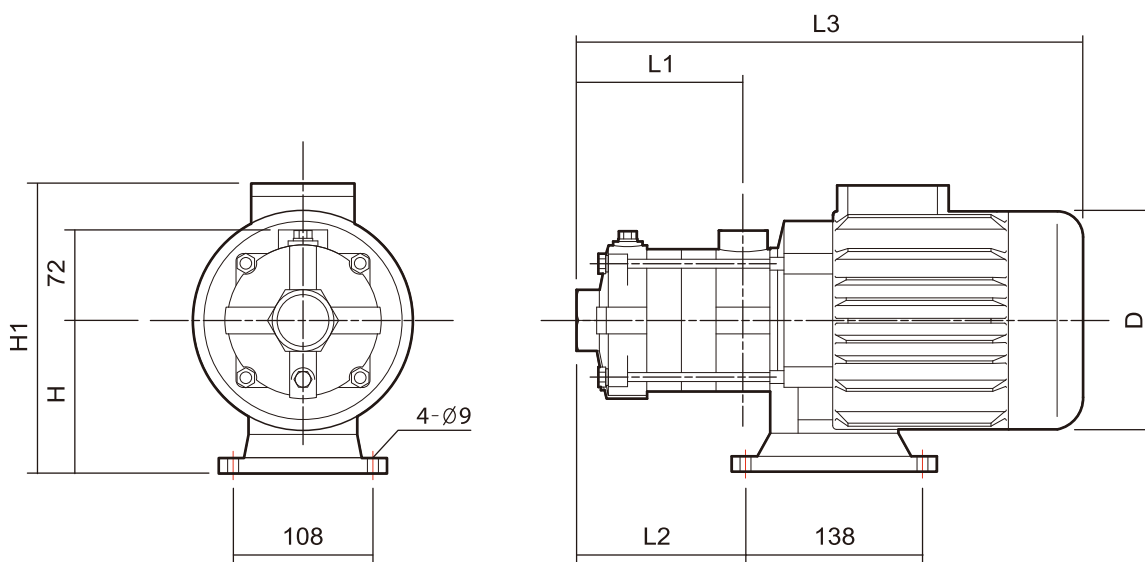
Description	DHF(T)1	DHF(T)2	DHF(T)3	DHF(T)4	DHF(T)5	DHF(T)10	DHF(T)15	DHF(T)20
Rated Flow [m³/h]	1	2	3	4	5	10	15	20
Flow Range [m³/h]	0.8-2.9	1-4.5	1.4-5.4	2.5-8	3-10.3	6-15.8	10.2-28.6	12.5-35
Max. operation pressure [bar]	10							
Motor Power [kW]	0.37-0.75	0.55-1.1	0.37-1.1	0.75-2.2	0.55-2.2	0.75-4	1.5-7.5	2.2-7.5
Liquid Temperature [°C]	-15 ~ 70°C							
Ambient Temperature [°C]	Max. 40°C							
Pump Type	Horizontal Multistage Pump							
Inlet size	25A	25A	25A	32A	32A	40A	50A	50A
Outlet size	25A	25A	25A	25A	25A	32A	50A	50A

### Performance Curve



※ Given that the product mentioned above is customised, please contact the main office.

### Outline Drawing

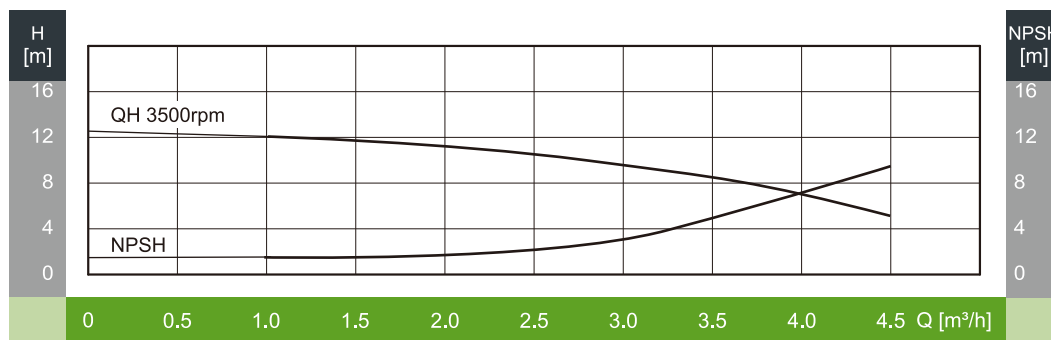
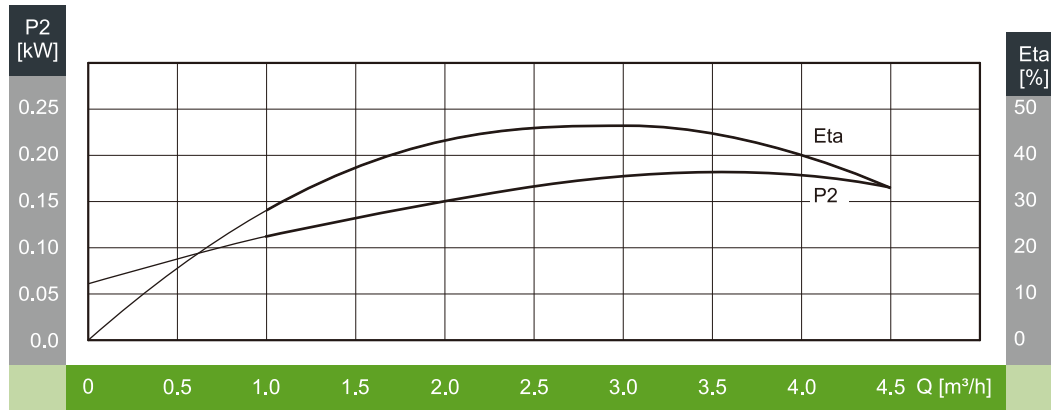
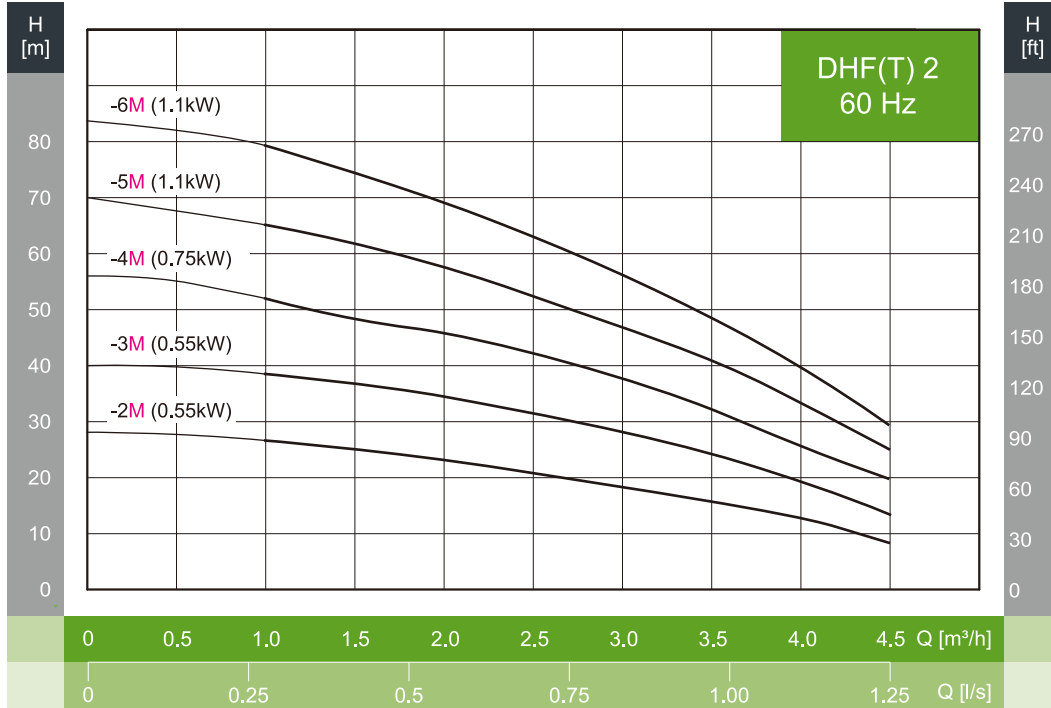


### Dimension / Weight

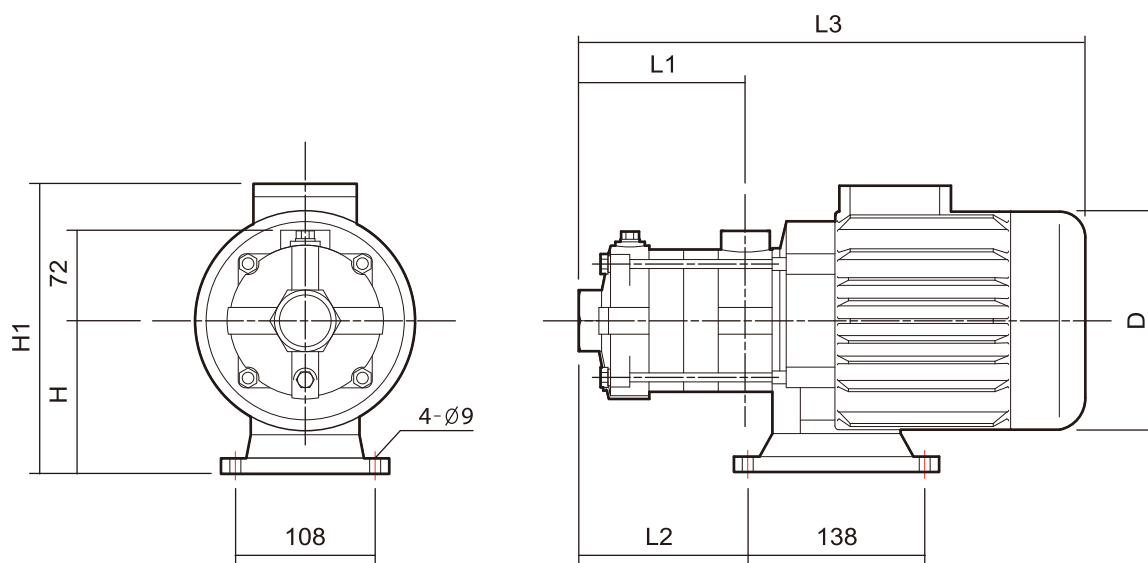
MODEL	DIAMETER		POWER		SIZE (mm)						WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	H1	D	
DHF(T)1-2M	25A	25A	0.37	0.5	85.5	88.5	313	110	229	140	16
DHF(T)1-3M	25A	25A	0.37	0.5	103.5	106.5	331	110	229	140	16
DHF(T)1-4M	25A	25A	0.37	0.5	121.5	124.5	349	110	229	140	16
DHF(T)1-5M	25A	25A	0.55	0.75	139.5	142.5	367	110	229	140	17
DHF(T)1-6M	25A	25A	0.55	0.75	157.5	160.5	385	110	229	140	17
DHF(T)1-7M	25A	25A	0.75	1	175.5	178.5	427	110	236	150	18
DHF(T)1-8M	25A	25A	0.75	1	193.5	196.5	445	110	236	150	18

Notice | "M" is omitted from the model name, For the 3phase 220V/380V power input.

### Performance Curve



### Outline Drawing

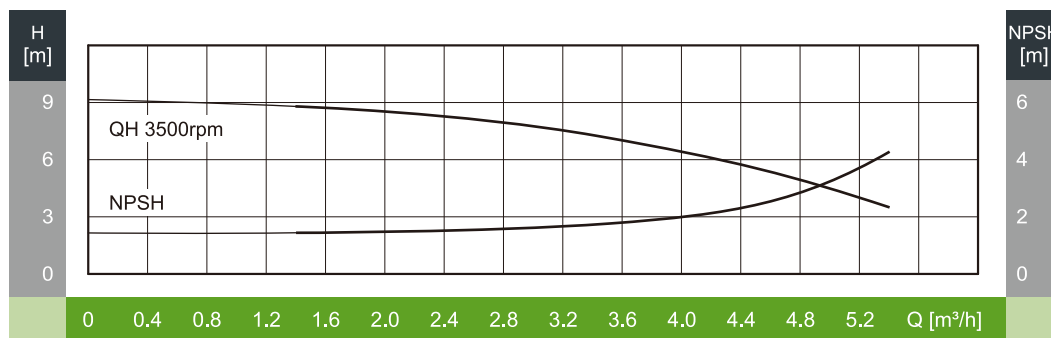
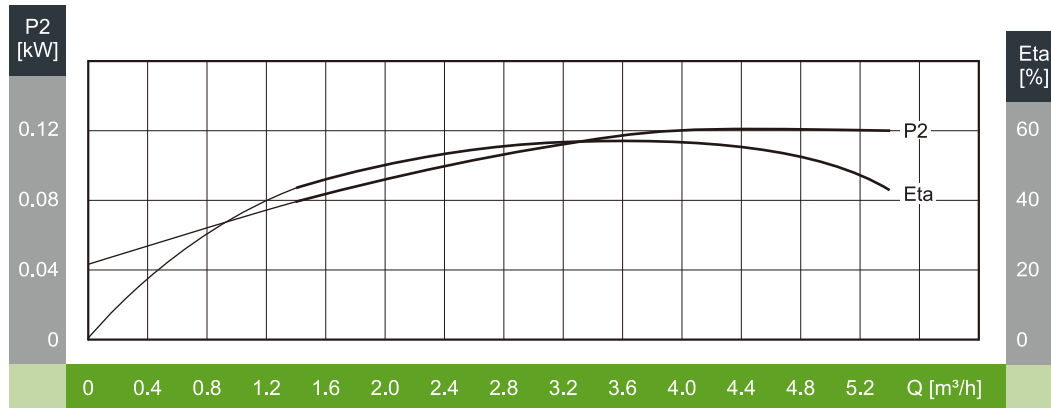
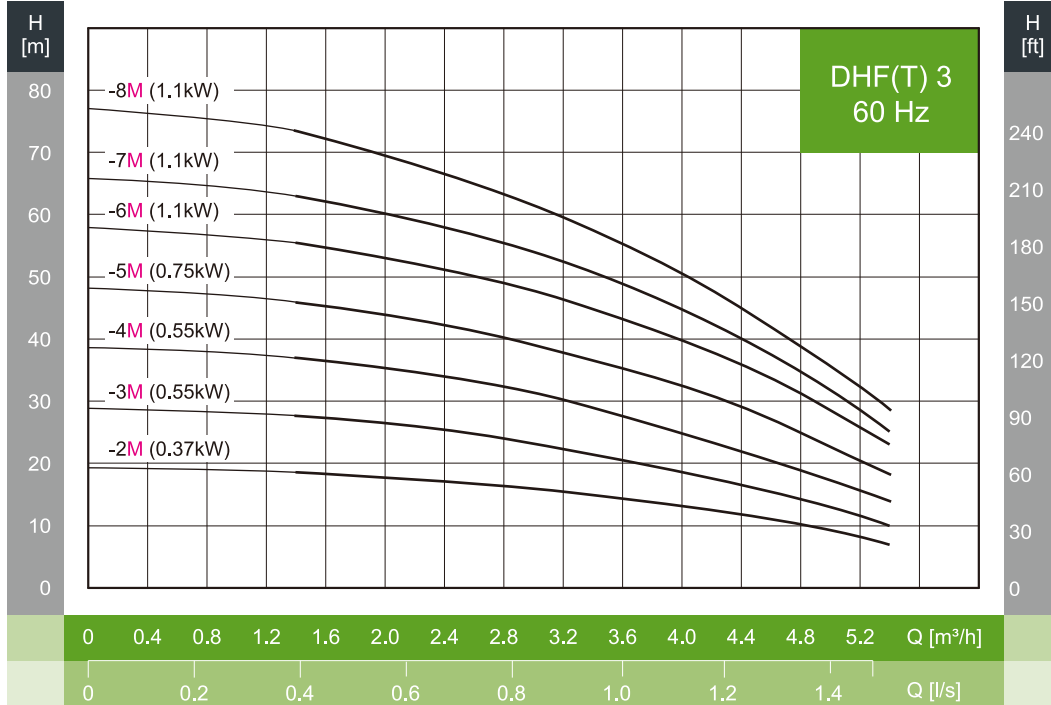


### Dimension / Weight

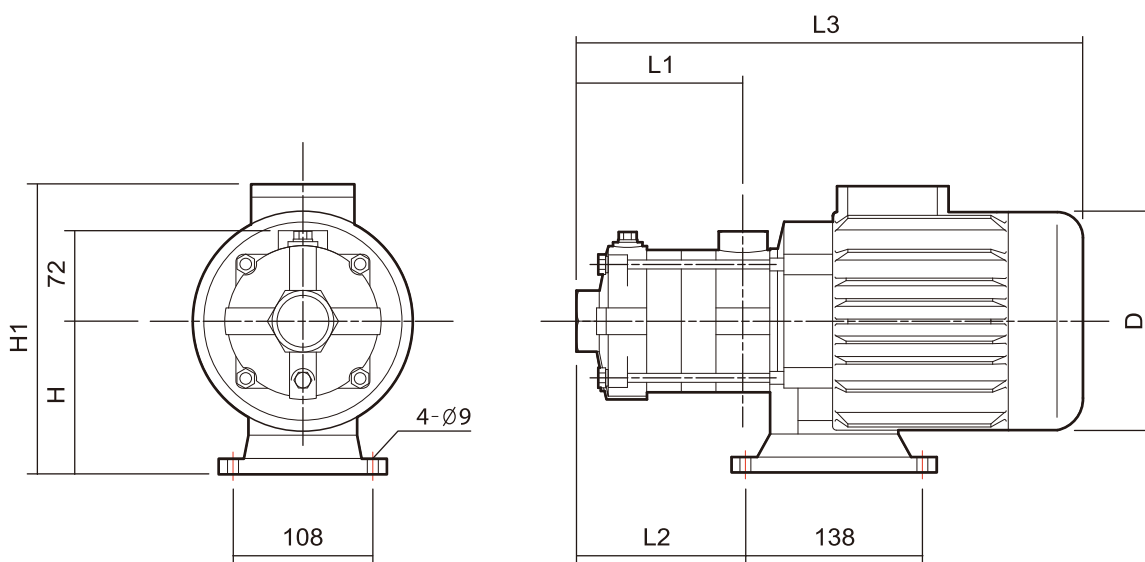
MODEL	DIAMETER		POWER		SIZE (mm)						WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	H1	D	
DHF(T)2-2M	25A	25A	0.55	0.75	85.5	88.5	313	110	229	140	17
DHF(T)2-3M	25A	25A	0.55	0.75	103.5	106.5	331	110	229	140	17
DHF(T)2-4M	25A	25A	0.75	1	121.5	124.5	373	110	236	150	18
DHF(T)2-5M	25A	25A	1.1	1.5	139.5	142.5	391	110	236	150	18
DHF(T)2-6M	25A	25A	1.1	1.5	157.5	160.5	409	110	236	150	19

Notice | "M" is omitted from the model name, For the 3phase 220V/380V power input.

### Performance Curve



### Outline Drawing

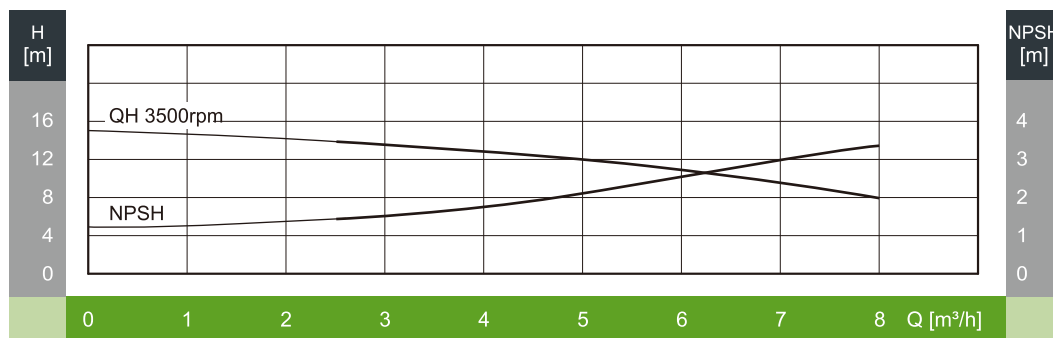
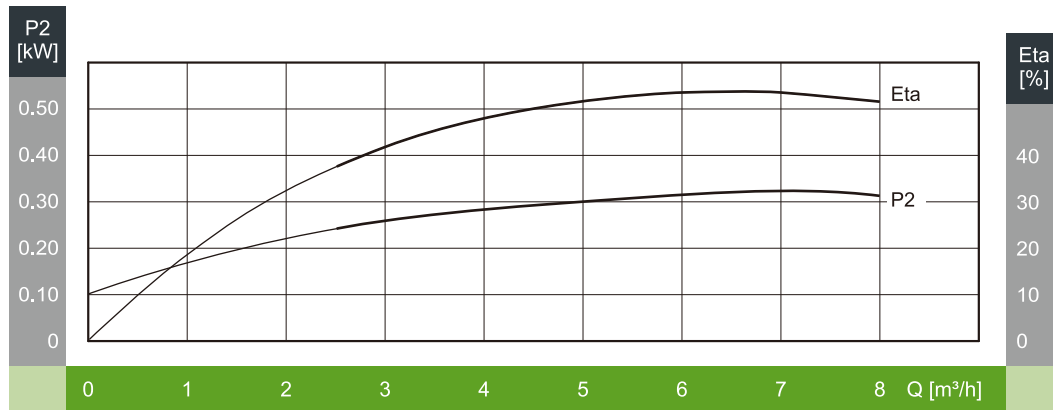
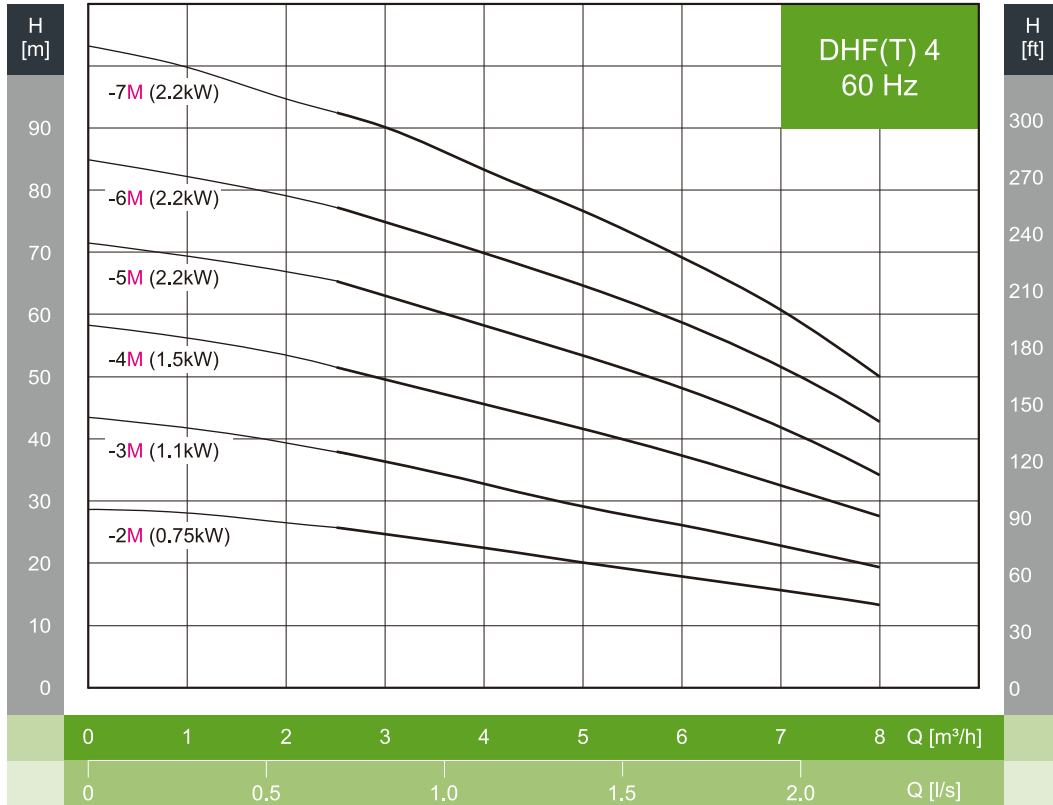


### Dimension / Weight

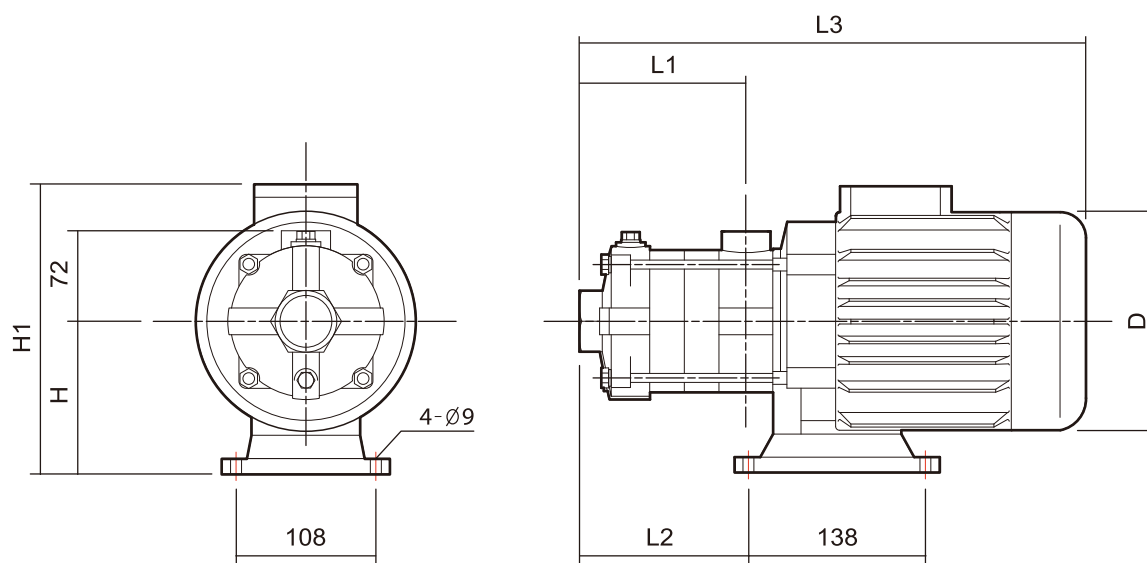
MODEL	DIAMETER		POWER		SIZE (mm)						WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	H1	D	
DHF(T)3-2M	25A	25A	0.37	0.5	85.5	88.5	313	110	229	140	16
DHF(T)3-3M	25A	25A	0.55	0.75	103.5	106.5	331	110	229	140	17
DHF(T)3-4M	25A	25A	0.55	0.75	121.5	124.5	349	110	229	140	17
DHF(T)3-5M	25A	25A	0.75	1	139.5	142.5	391	110	236	150	18
DHF(T)3-6M	25A	25A	1.1	1.5	157.5	160.5	409	110	236	150	19
DHF(T)3-7M	25A	25A	1.1	1.5	175.5	178.5	427	110	236	150	19
DHF(T)3-8M	25A	25A	1.1	1.5	193.5	196.5	445	110	236	150	20

Notice | "M" is omitted from the model name, For the 3phase 220V/380V power input.

### Performance Curve



### Outline Drawing

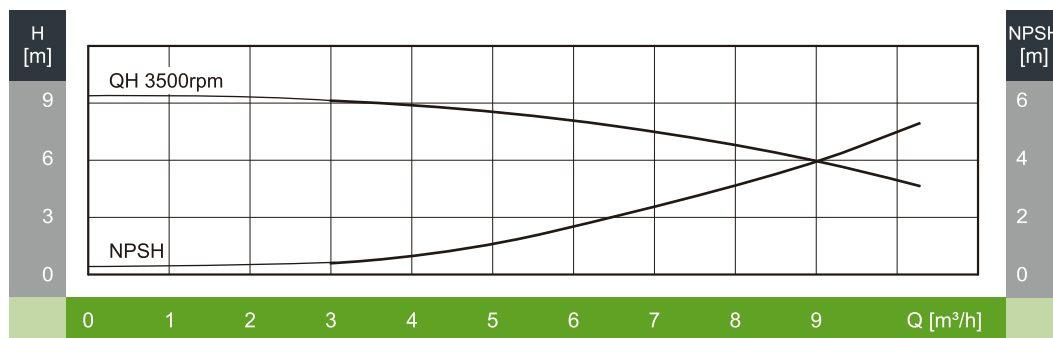
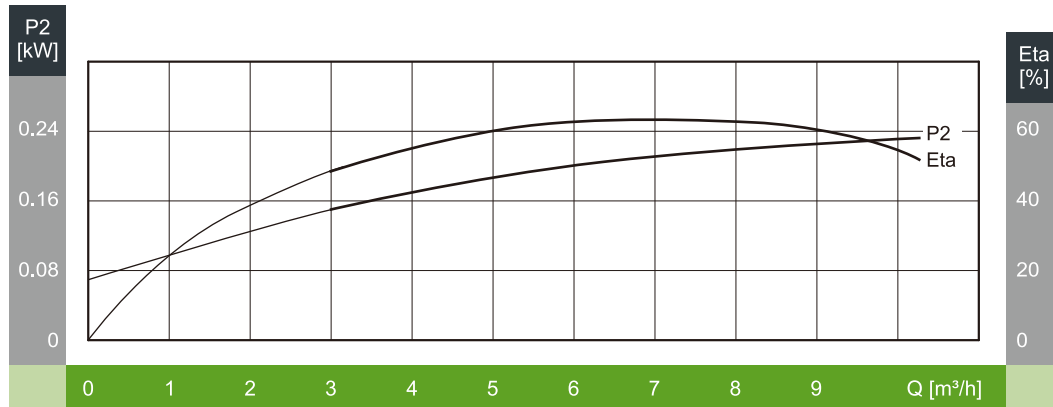
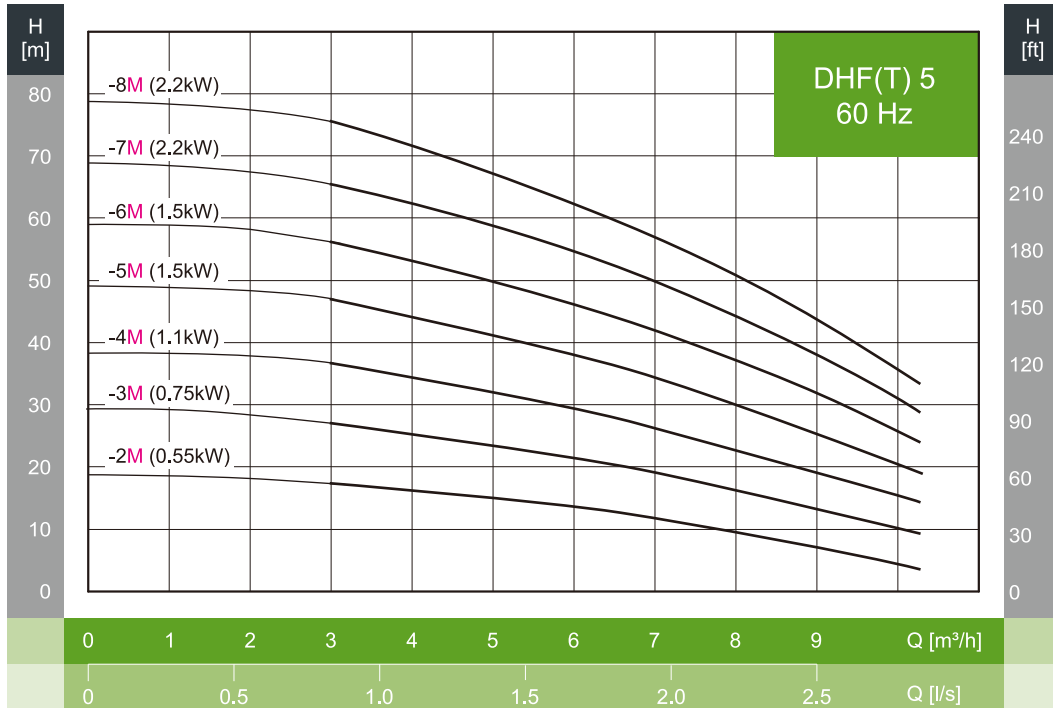


### Dimension / Weight

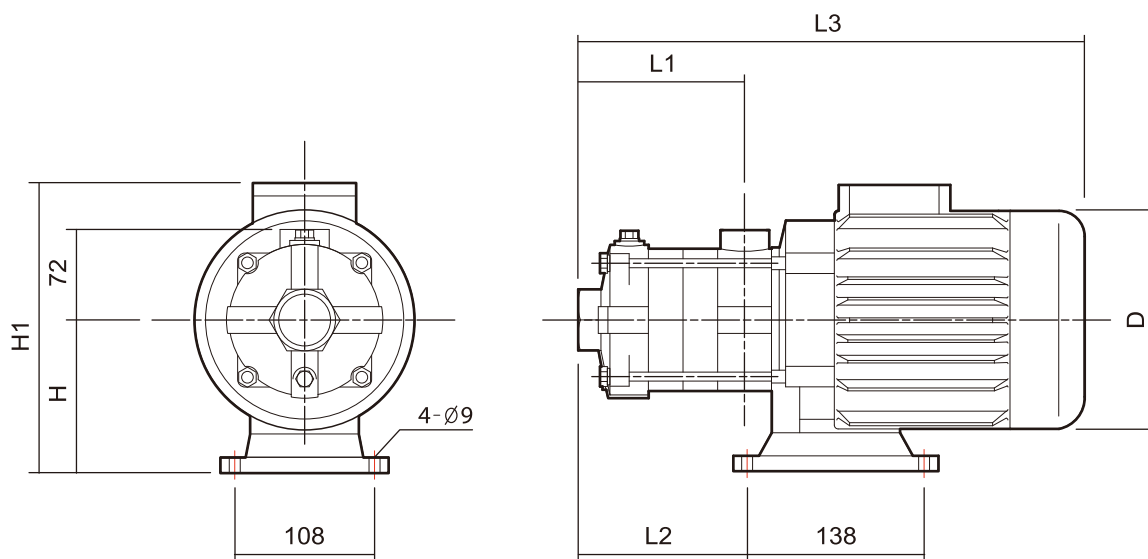
MODEL	DIAMETER		POWER		SIZE (mm)						WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	H1	D	
DHF(T)4-2M	32A	25A	0.75	1	103	106	355	110	236	150	18
DHF(T)4-3M	32A	25A	1.1	1.5	130	133	382	110	236	150	19
DHF(T)4-4M	32A	25A	1.5	2	157	160	446	118	255	171	25
DHF(T)4-5M	32A	25A	2.2	3	184	187	473	118	255	171	28
DHF(T)4-6M	32A	25A	2.2	3	211	214	500	118	255	171	28
DHF(T)4-7M	32A	25A	2.2	3	238	241	527	118	255	171	28

Notice | "M" is omitted from the model name, For the 3phase 220V/380V power input.

### Performance Curve



### Outline Drawing

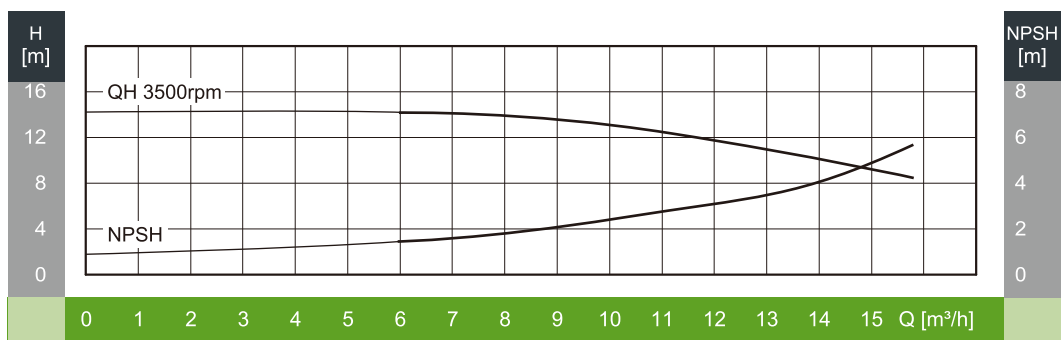
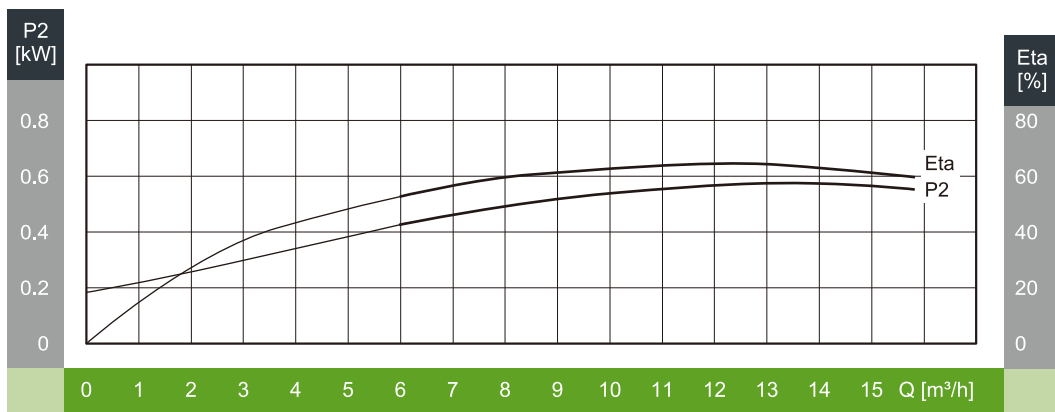
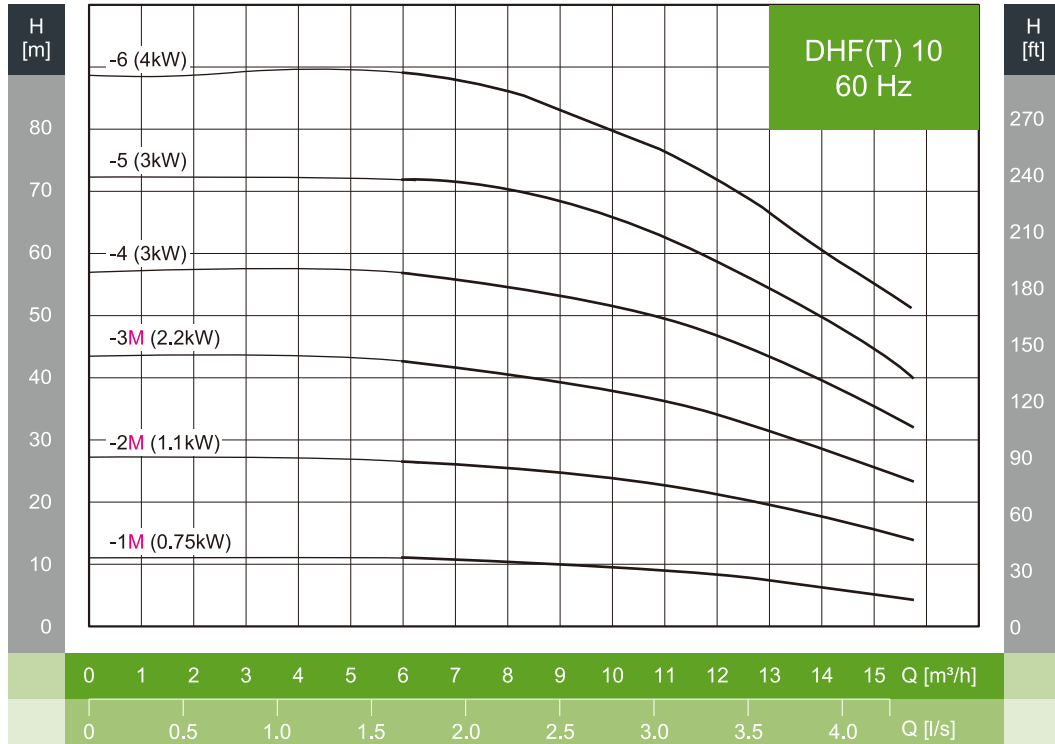


### Dimension / Weight

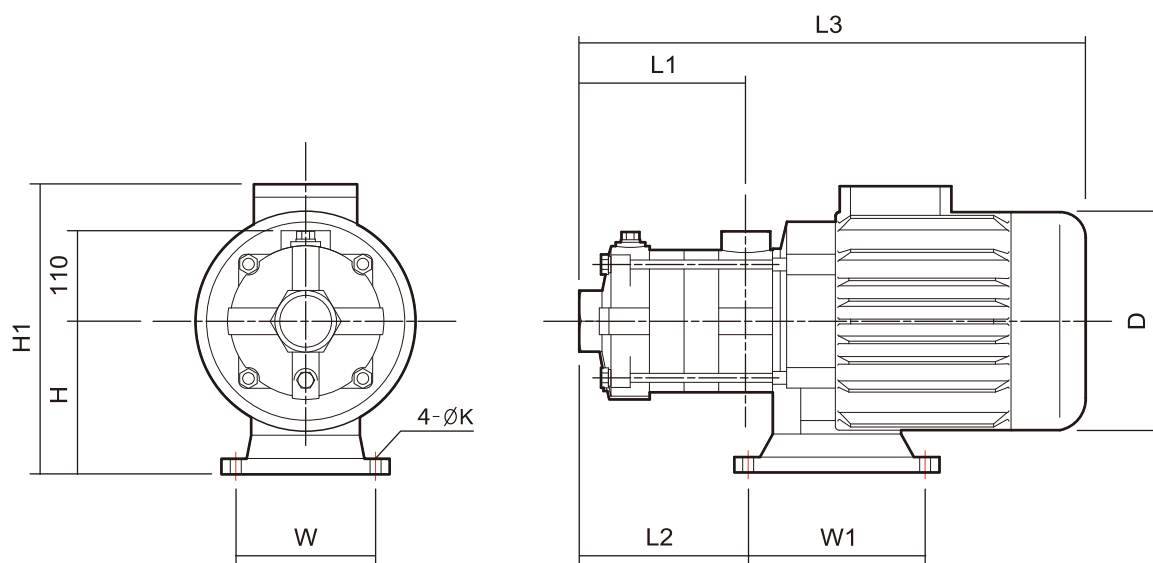
MODEL	DIAMETER		POWER		SIZE (mm)						WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	H1	D	
DHF(T)5-2M	32A	25A	0.55	0.75	103	106	330	110	229	140	17
DHF(T)5-3M	32A	25A	0.75	1	130	133	391	110	236	150	19
DHF(T)5-4M	32A	25A	1.1	1.5	157	160	409	110	236	150	20
DHF(T)5-5M	32A	25A	1.5	2	184	187	473	118	255	171	25
DHF(T)5-6M	32A	25A	1.5	2	211	214	491	118	255	171	28
DHF(T)5-7M	32A	25A	2.2	3	238	241	527	118	255	171	28
DHF(T)5-8M	32A	25A	2.2	3	265	268	554	118	255	171	29

Notice | "M" is omitted from the model name, For the 3phase 220V/380V power input.

### Performance Curve



### Outline Drawing

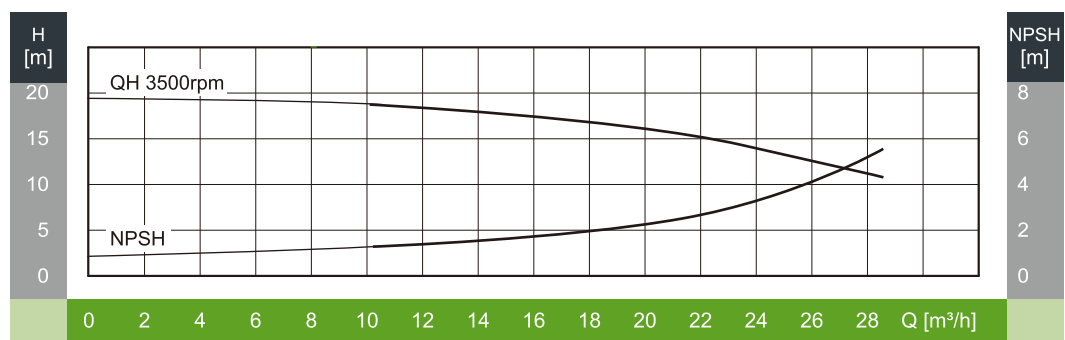
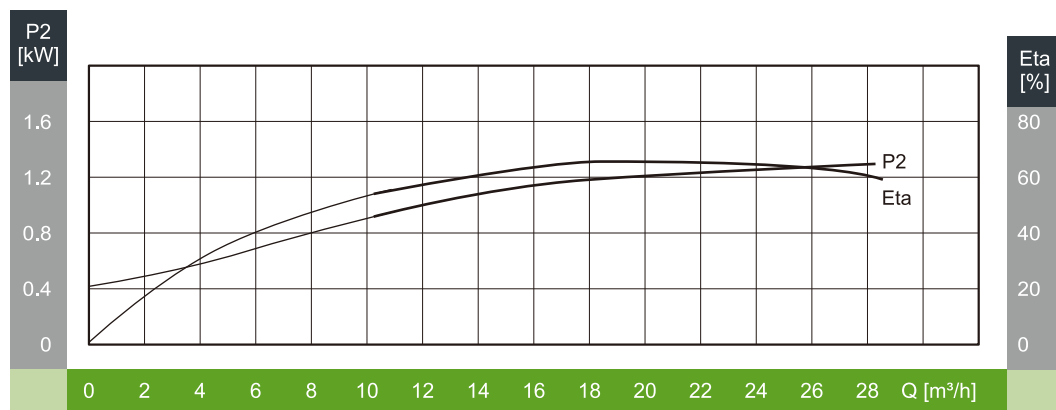
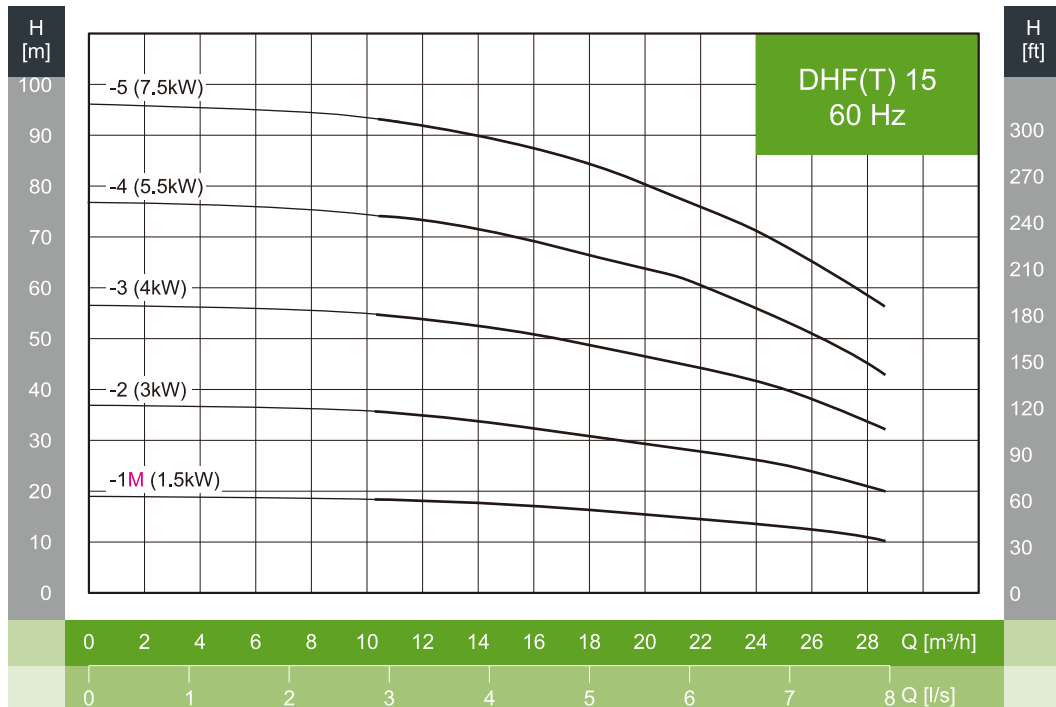


### Dimension / Weight

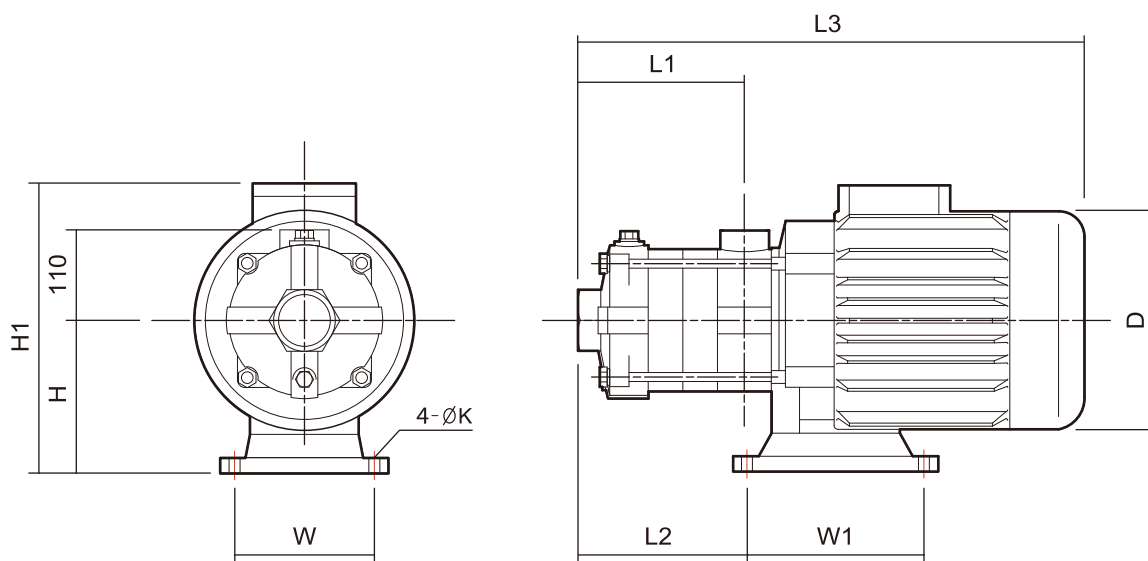
MODEL	DIAMETER		POWER		SIZE (mm)									WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	W	W1	H	H1	D	K	
DHF(T)10-1M	40A	32A	0.75	1	76	94	344	108	138	117	242	151	9	21
DHF(T)10-2M	40A	32A	1.1	1.5	106	124	414	108	138	118	255	171	9	24
DHF(T)10-3M	40A	32A	2.2	3	136	154	444	108	138	118	255	171	9	30
DHF(T)10-4	40A	32A	3	4	166	184	530	108	138	130	280	196	9	38
DHF(T)10-5	40A	32A	3	4	196	214	560	108	138	130	280	196	9	39
DHF(T)10-6	40A	32A	4	5.5	226	244	596	190	140	120	288	214	12	48

Notice | "M" is omitted from the model name, For the 3phase 220V/380V power input.

### Performance Curve



### Outline Drawing

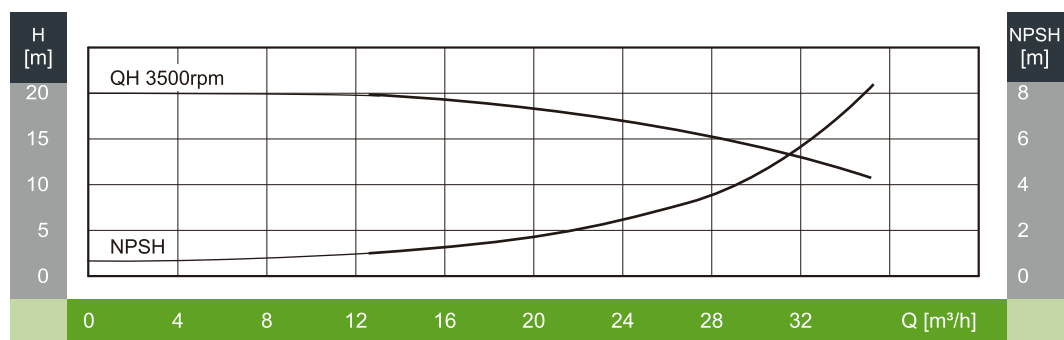
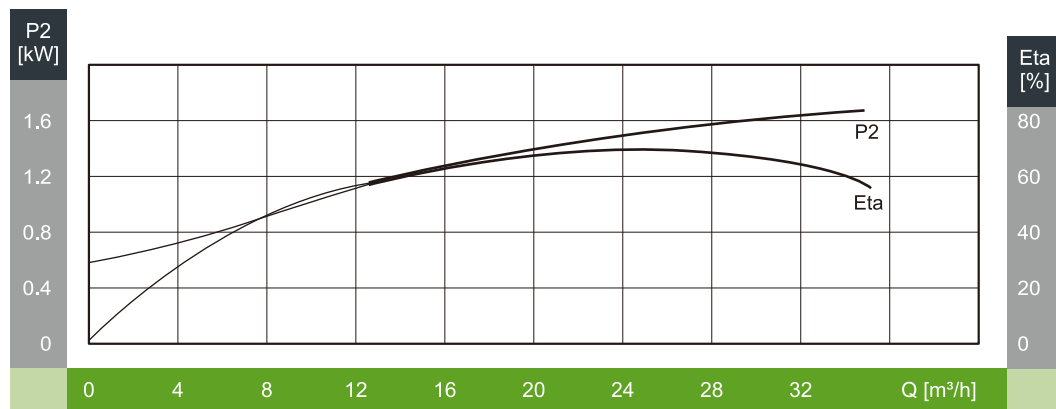
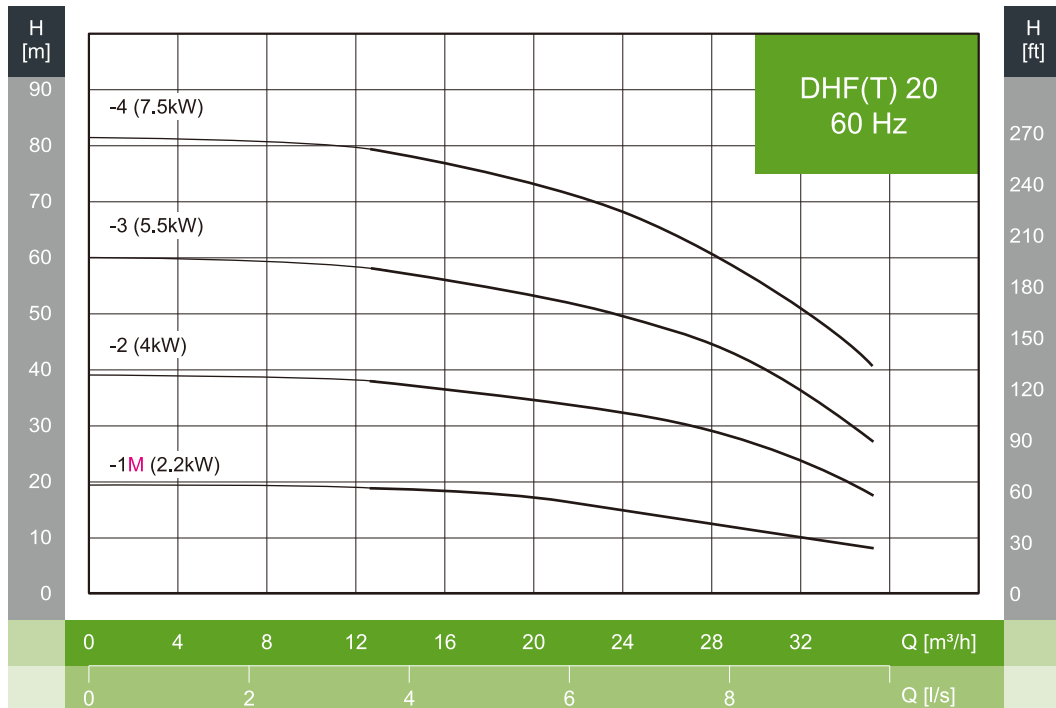


### Dimension / Weight

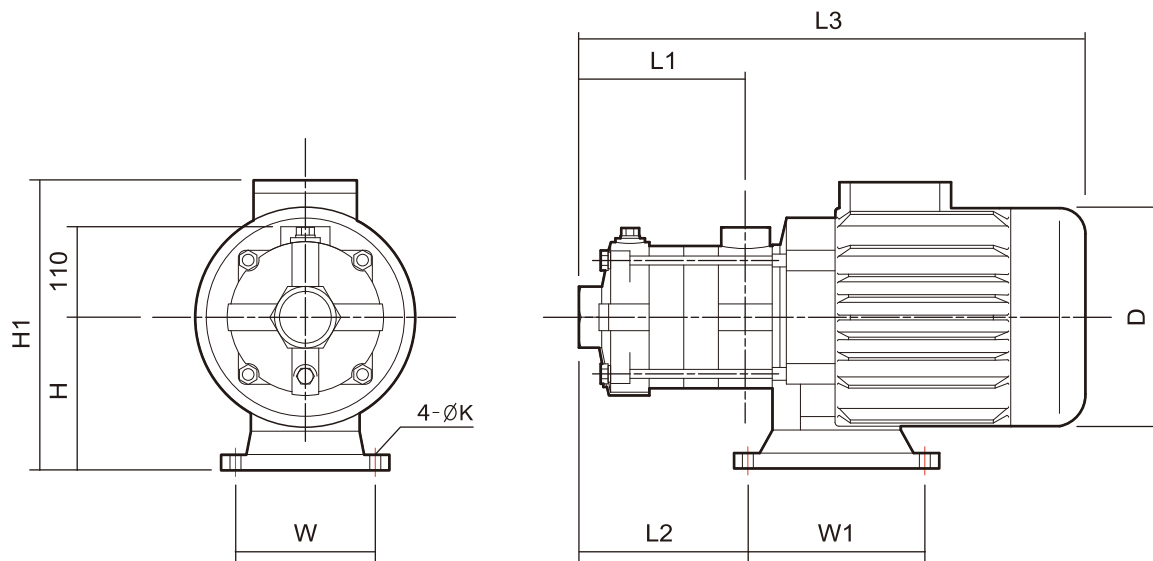
MODEL	DIAMETER		POWER		SIZE (mm)									WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	W	W1	H	H1	D	K	
DHF(T)15-1M	50A	50A	1.5	2	81	105	395	108	138	118	255	171	9	28
DHF(T)15-2	50A	50A	3	4	126	150	496	108	138	130	280	196	9	39
DHF(T)15-3	50A	50A	4	5.5	171	195	547	190	140	120	288	214	12	46
DHF(T)15-4	50A	50A	5.5	7.5	216	240	643	216	140	132	322	257	12	66
DHF(T)15-5	50A	50A	7.5	10	261	285	688	216	140	132	322	257	12	69

Notice | "M" is omitted from the model name, For the 3phase 220V/380V power input.

### Performance Curve



### Outline Drawing



### Dimension / Weight

MODEL	DIAMETER		POWER		SIZE (mm)									WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	W	W1	H	H1	D	K	
DHF(T)20-1M	50A	50A	2.2	3	81	105	395	108	138	118	255	171	9	31
DHF(T)20-2	50A	50A	4	5.5	126	150	502	190	140	120	288	214	12	46
DHF(T)20-3	50A	50A	5.5	7.5	171	195	598	216	140	132	322	257	12	65
DHF(T)20-4	50A	50A	7.5	10	216	240	643	216	140	132	322	257	12	68

Notice | "M" is omitted from the model name, For the 3phase 220V/380V power input.



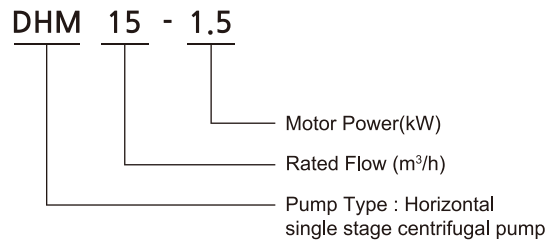
### Features

- DHM is single-stage centrifugal pump and features an axial suction and radial discharge.
- Compact structure: the pump is directly connected to the motor
- Convenient installation, screw thread water inlet and outlet
- Light weight, thin, plate pressing structure for main parts and components

### Application

- Pressurization and pumping of industrial and civilian clean water or other liquids.
- Water treatment
- Water circulating system
- Other fields for water supply

### Definition of Model



### Pump Liquid

Clean, thin, non-flammable and explosive, not containing the liquid with solid particle and fiber.

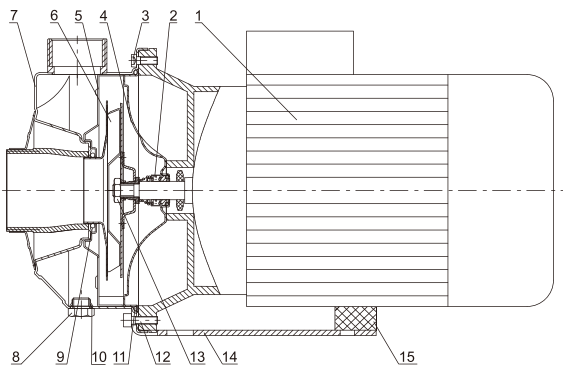
### Installation Requirement

- The pump shall be fastened on the stable horizontal base
- The installation of the pump shall ensure that the pump will not be forced by the tension of the pipeline
- The pump shall be installed on the ventilating and anti-freezing place
- Electric wiring device shall guarantee that the pump will not be damaged by lack of phase, unstable voltage, current leakage and overload.

### Motor Specification

Motor type : TEFC  
Protection class : IP54  
Insulation class : F  
Standard voltage : 3 phase 220V/380V, 60Hz

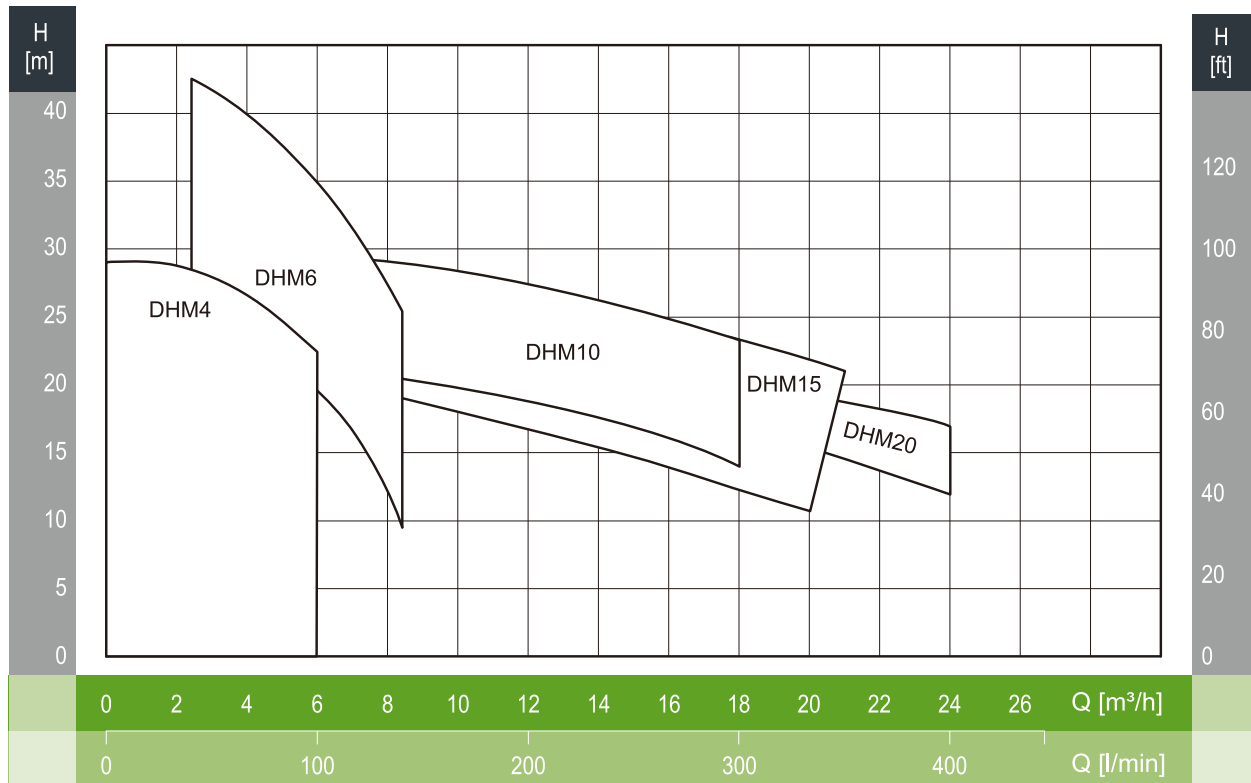
### Sectional Drawing



### Materials

NO.	PART	MATERIAL	AISI/ASTM
1	Motor	Cast iron / Aluminum diecastings	
2	Mechanical Seal	SIC/CARBON/VITON	
3	Bolt	Stainless steel	AISI304
4	Seal Housing	Stainless steel	AISI304
5	Diffuser	Stainless steel	AISI304
6	Impeller	Stainless steel	AISI304
7	Pump Body	Stainless steel	AISI304
8	Drain Plug	Stainless steel	AISI304
9-11	O-ring	EPDM	
12	Bolt	Stainless steel	AISI304
13	Impeller nut M10	Stainless steel	AISI304
14	Base	Steel	A570
15	Support	EPDM	

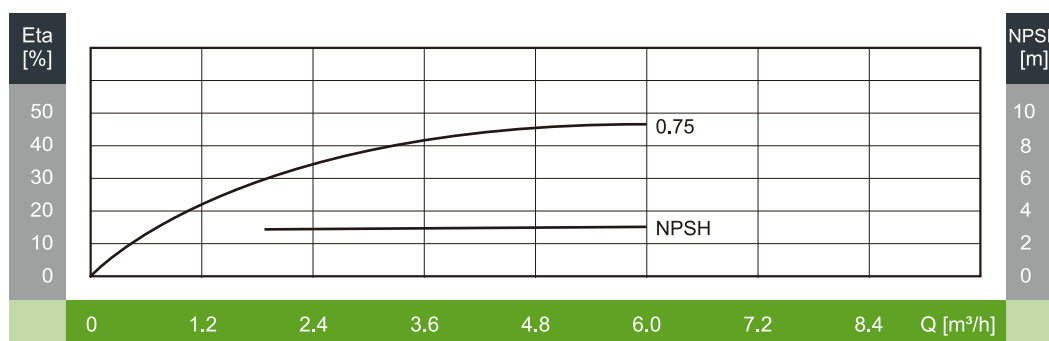
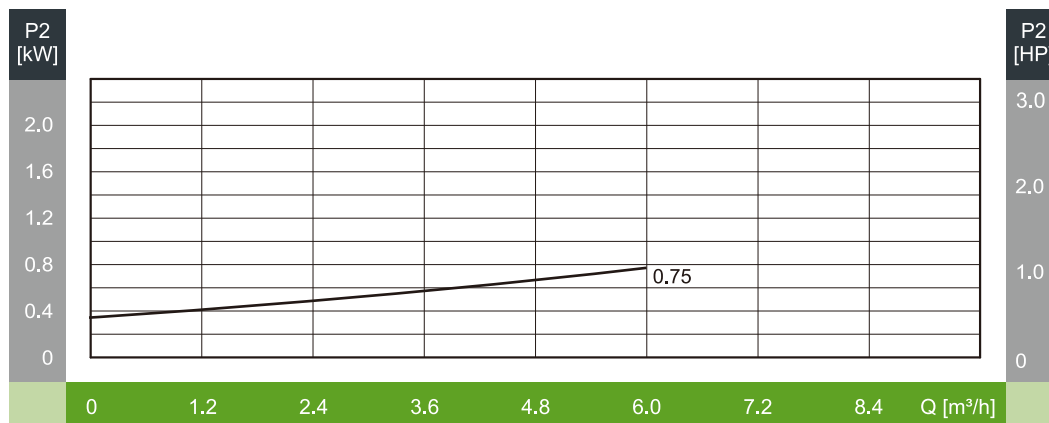
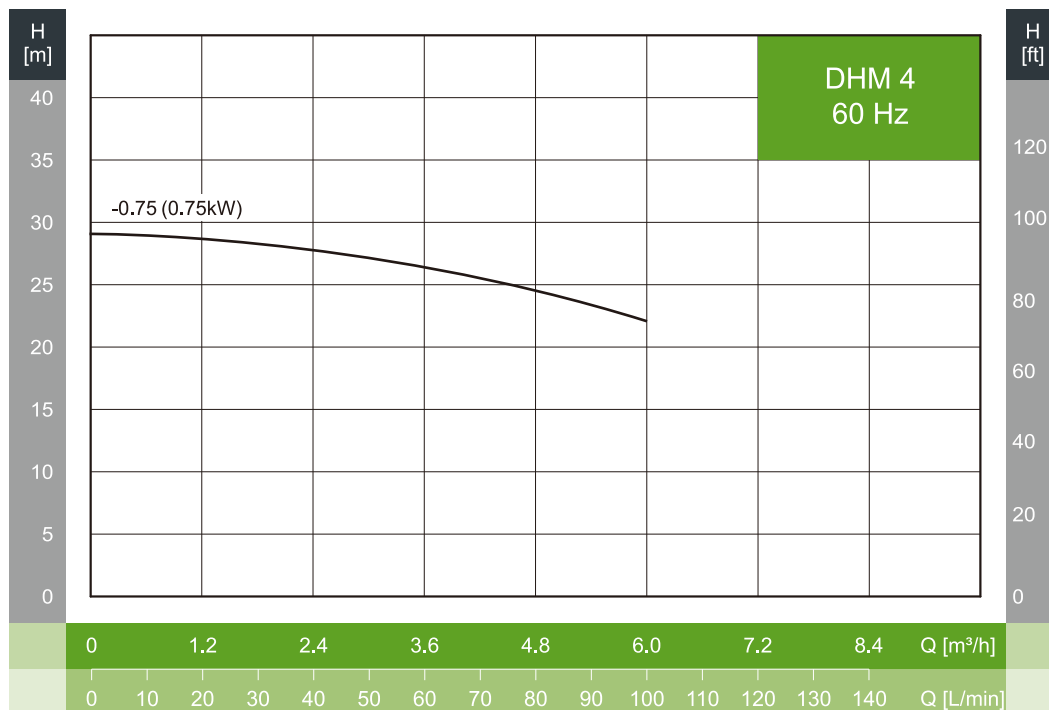
## Performance Range



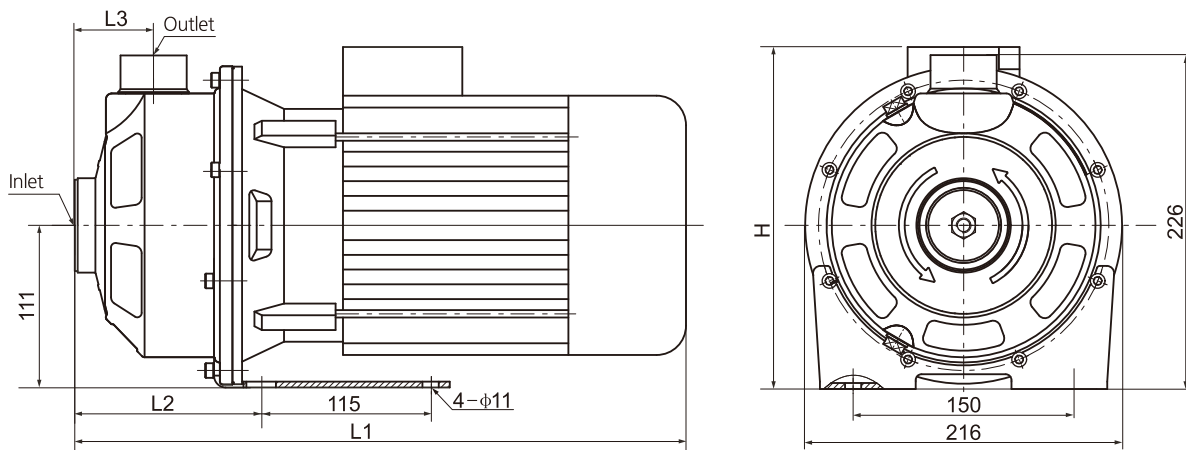
## Specification

Description	DHM4	DHM6	DHM10	DHM15	DHM20
Rated Flow [m³/h]	4	6	10	15	20
Flow Range [m³/h]	1.2-6	2.4-8.4	6-18	7.2-21	8.4-24
Max. operation pressure [bar]	8				
Motor Power [kW]	0.75	0.75-1.5	1.1-2.2	1.1-2.2	1.5-2.2
Liquid Temperature [°C]	-10 ~ 85°C				
Ambient Temperature [°C]	Max. 40°C				
Pump Type	Horizontal Single Stage Pump				
Inlet Diameter	32A	32A	40A	40A	50A
Outlet Diameter	25A	25A	32A	32A	32A

### Performance Curve



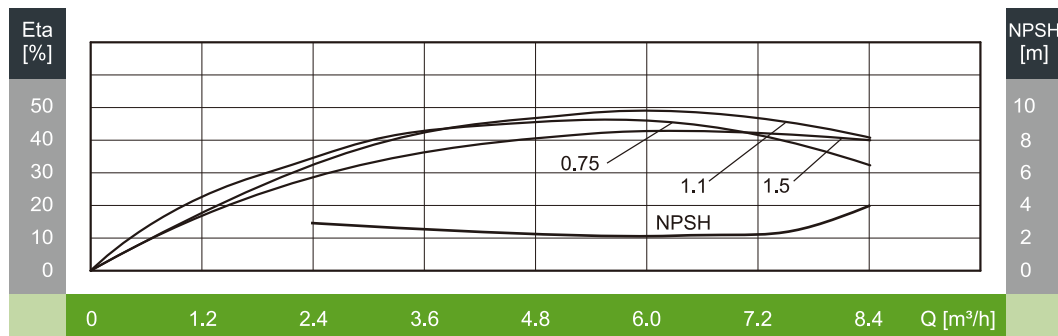
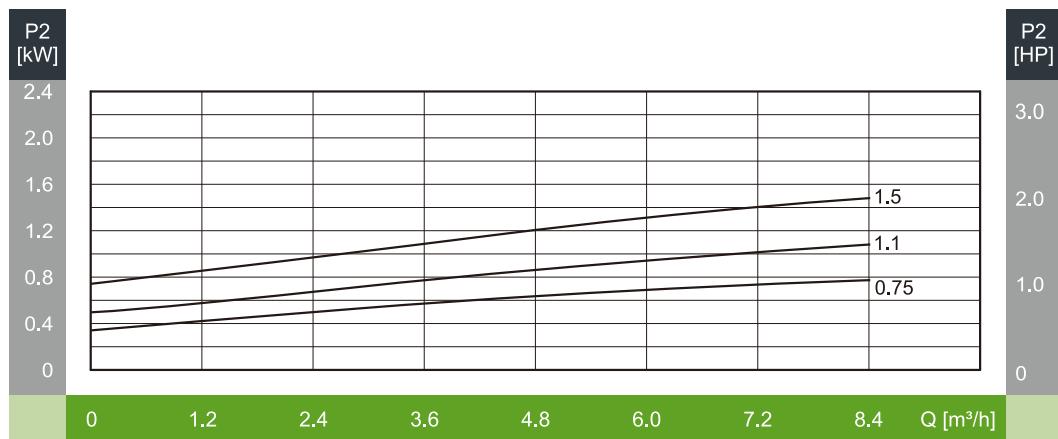
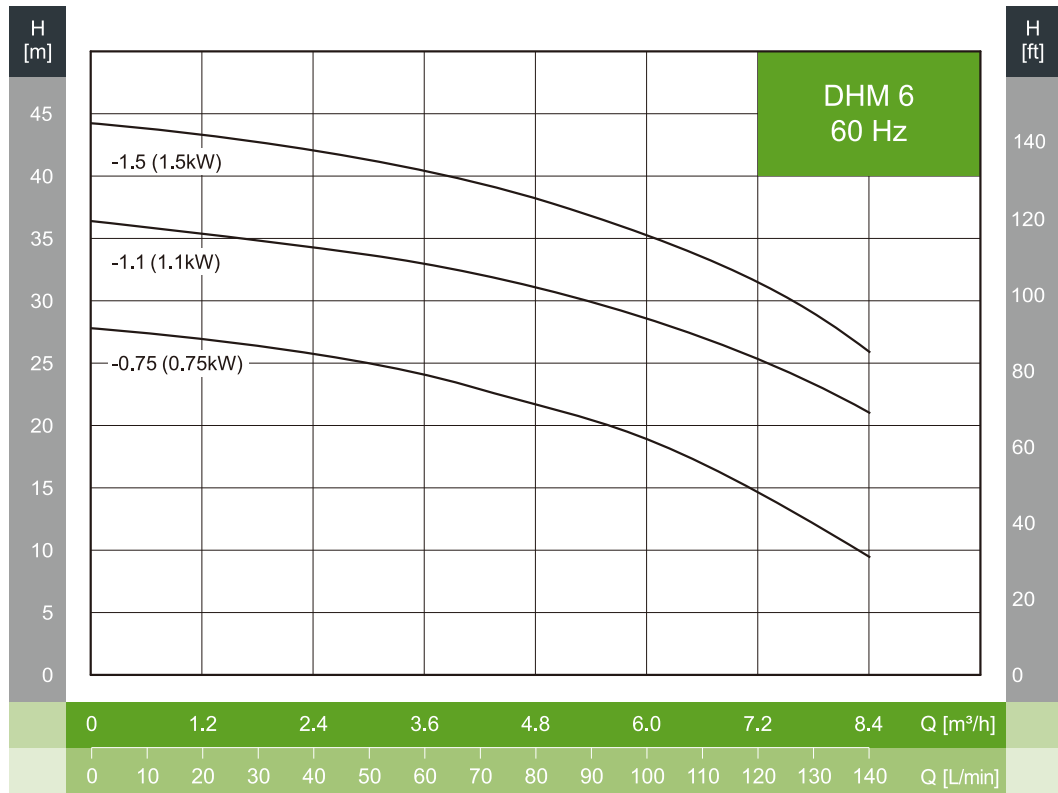
### Outline Drawing



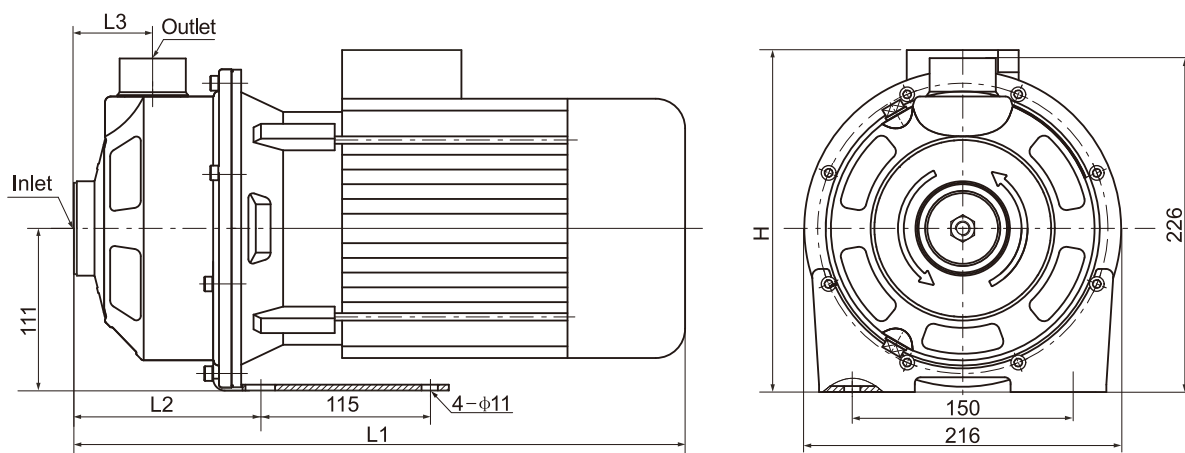
### Dimension / Weight

MODEL	DIAMETER		POWER		SIZE (mm)				WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	
DHM4-0.75	32A	25A	0.75	1	350.5	112.5	51	232.5	13

### Performance Curve



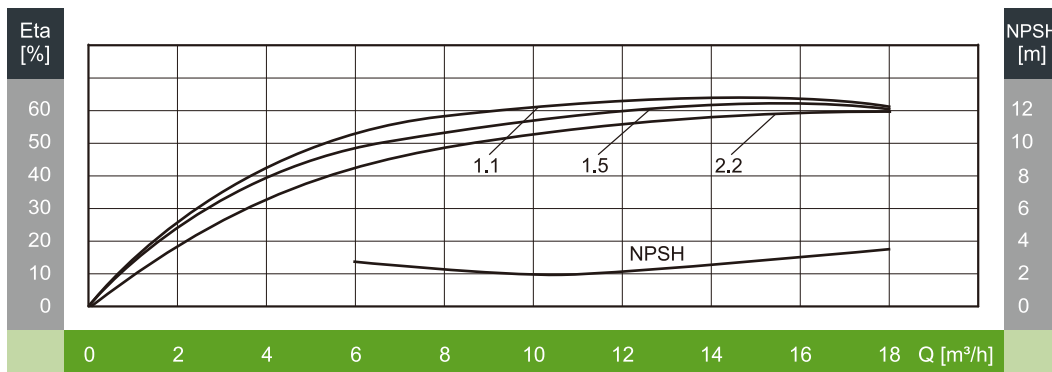
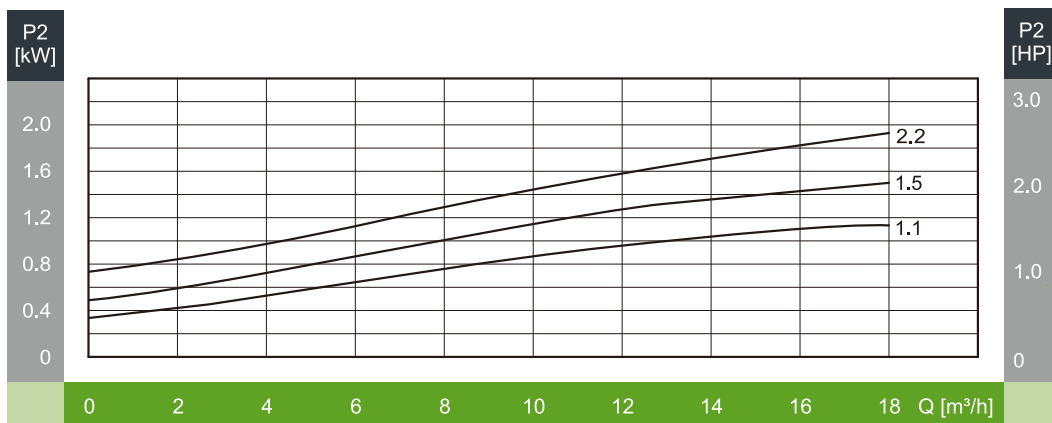
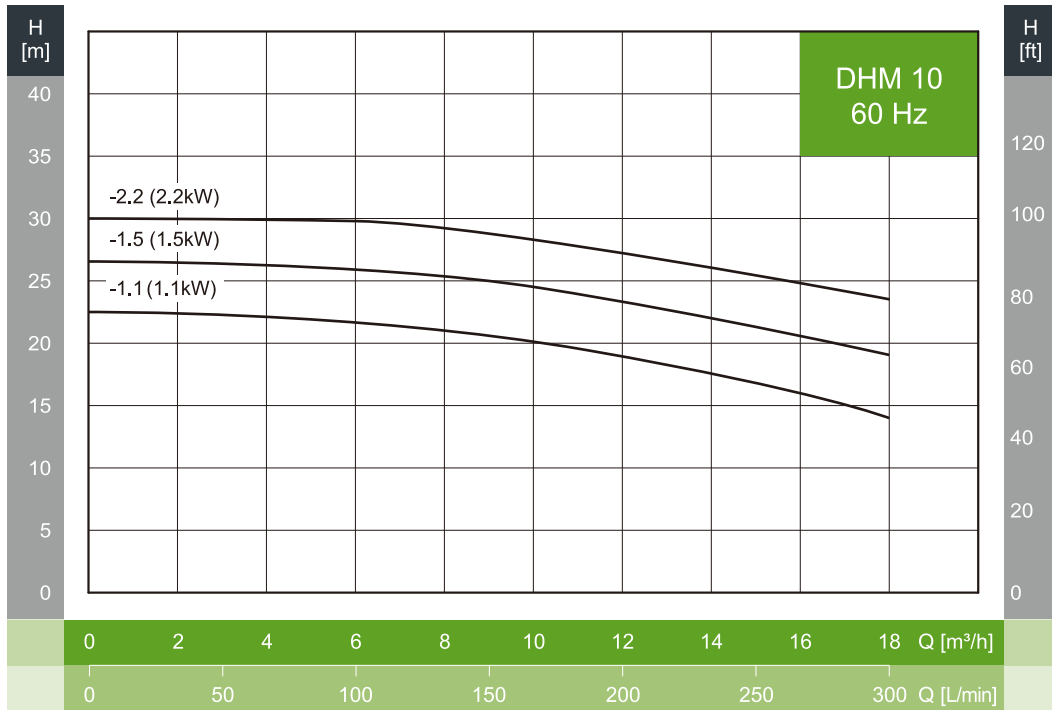
### Outline Drawing



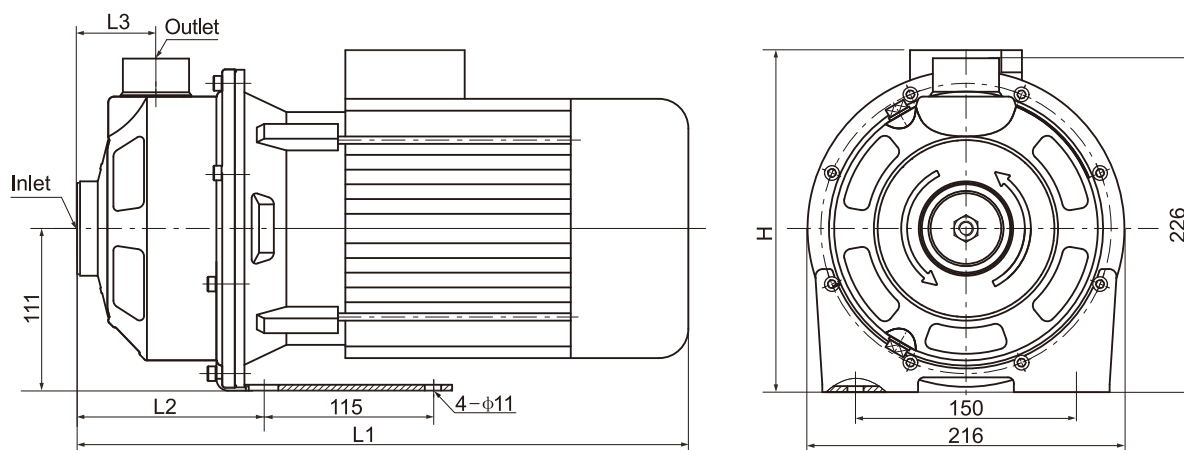
### Dimension / Weight

MODEL	DIAMETER		POWER		SIZE (mm)				WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	
DHM6-0.75	32A	25A	0.75	1	350.5	112.5	51	232.5	14
DHM6-1.1	32A	25A	1.1	1.5	350.5	112.5	51	232.5	14
DHM6-1.5	32A	25A	1.5	2	391	112.5	51	248	20

### Performance Curve



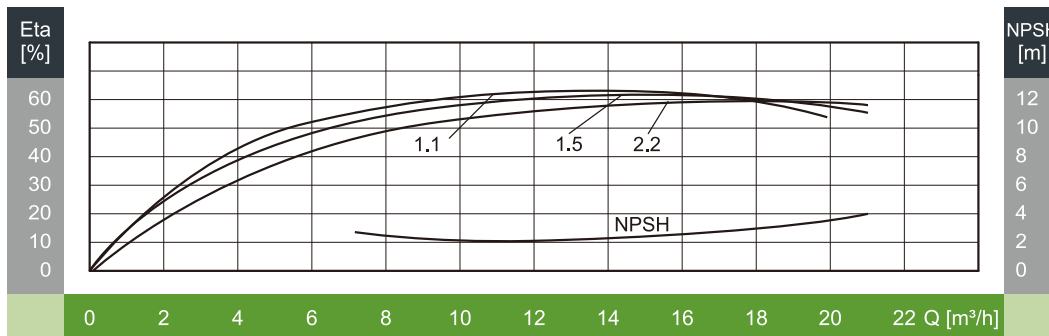
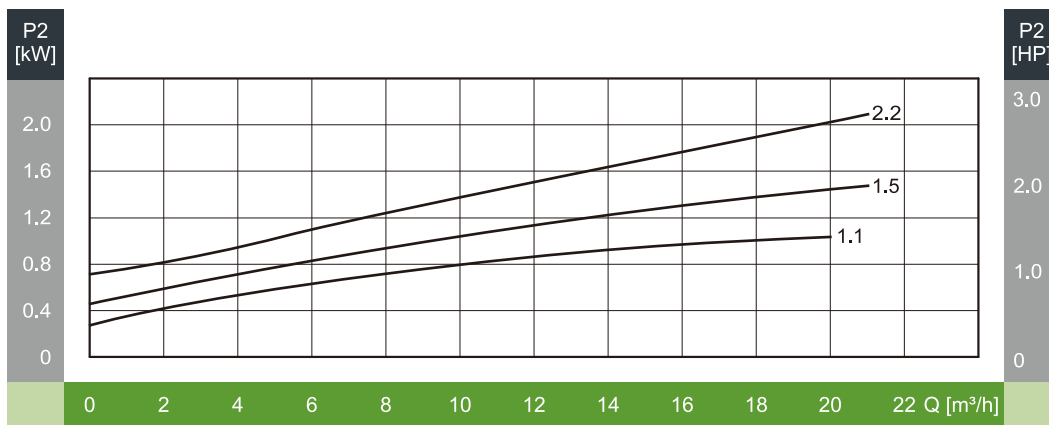
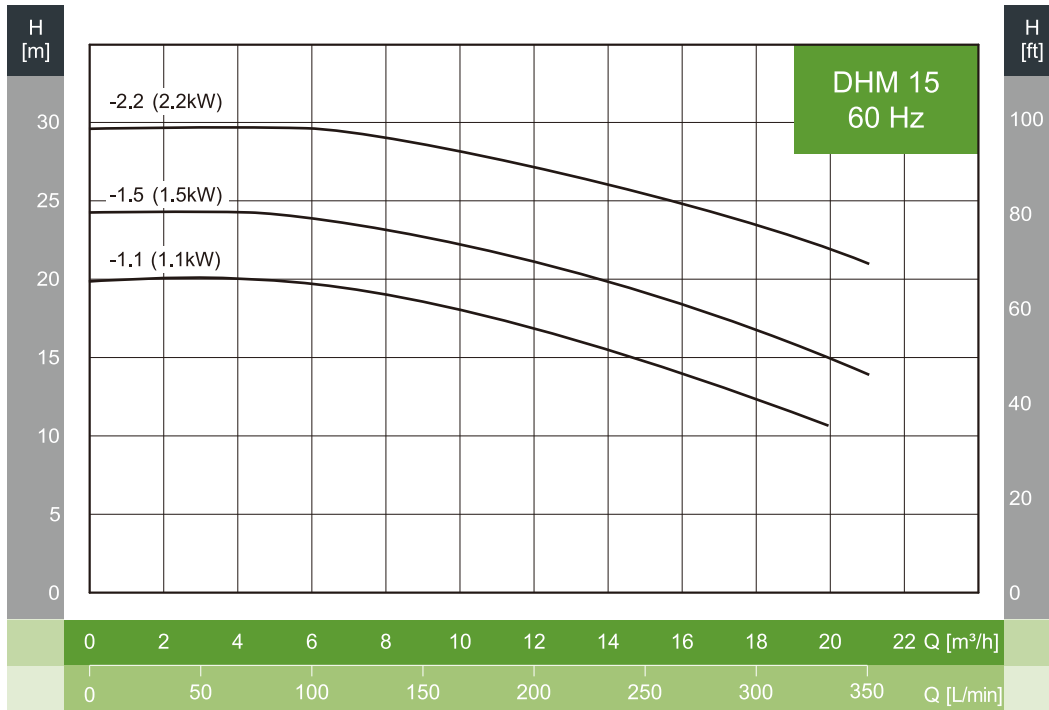
### Outline Drawing



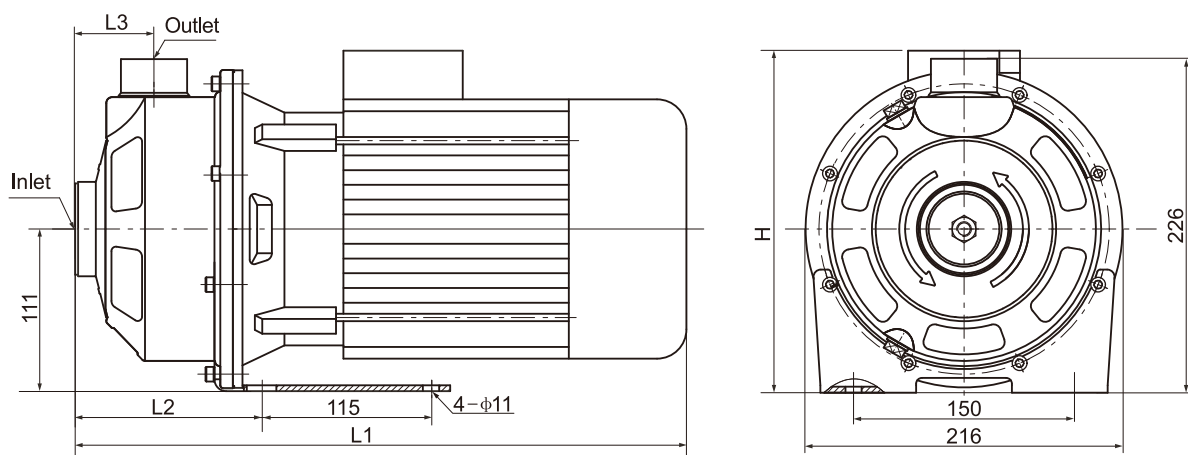
### Dimension / Weight

MODEL	DIAMETER		POWER		SIZE (mm)				WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	
DHM10-1.1	40A	32A	1.1	1.5	365	127	54	232.5	16
DHM10-1.5	40A	32A	1.5	2	405.5	127	54	248	20
DHM10-2.2	40A	32A	2.2	3	405.5	127	54	248	23

### Performance Curve



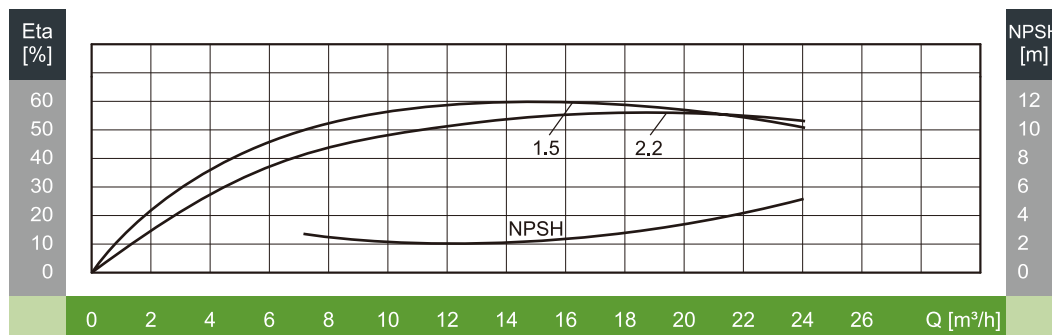
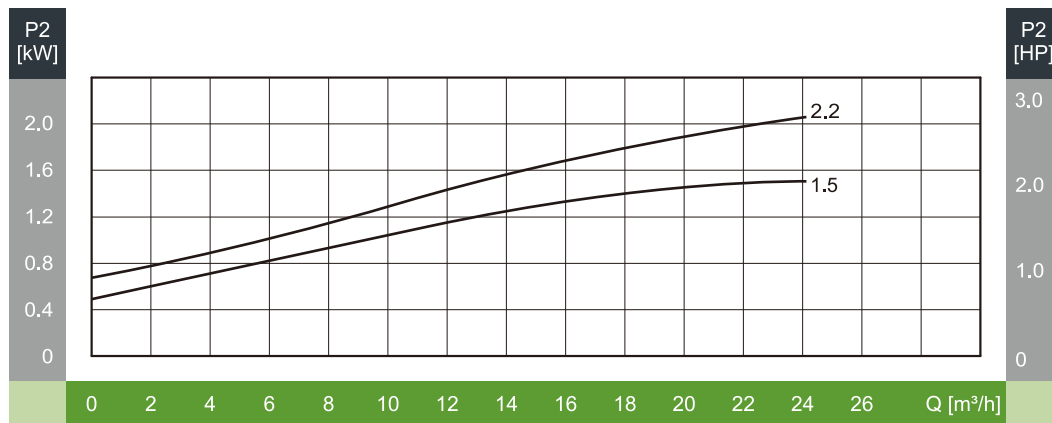
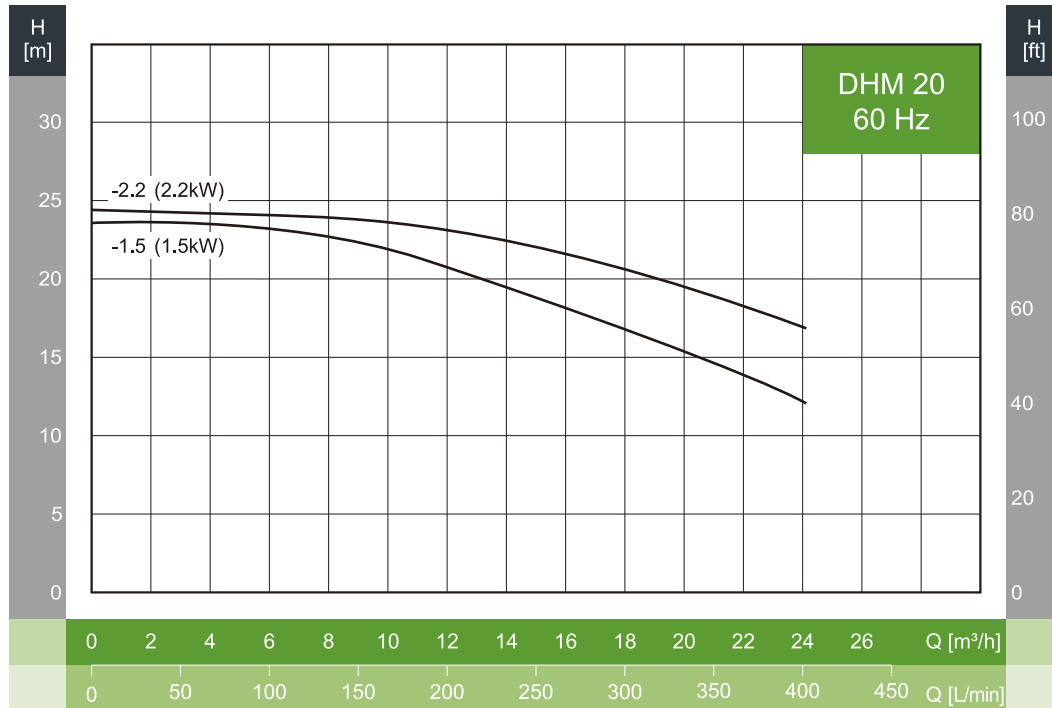
### Outline Drawing



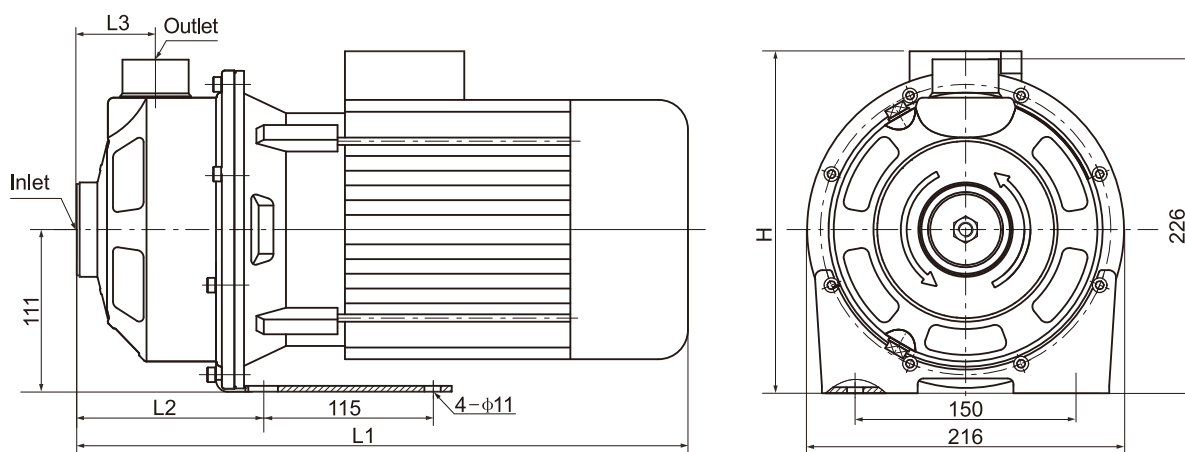
### Dimension / Weight

MODEL	DIAMETER		POWER		SIZE (mm)				WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	
DHM15-1.1	40A	32A	1.1	1.5	365	127	54	232.5	16
DHM15-1.5	40A	32A	1.5	2	405.5	127	54	248	20
DHM15-2.2	40A	32A	2.2	3	405.5	127	54	248	23

### Performance Curve



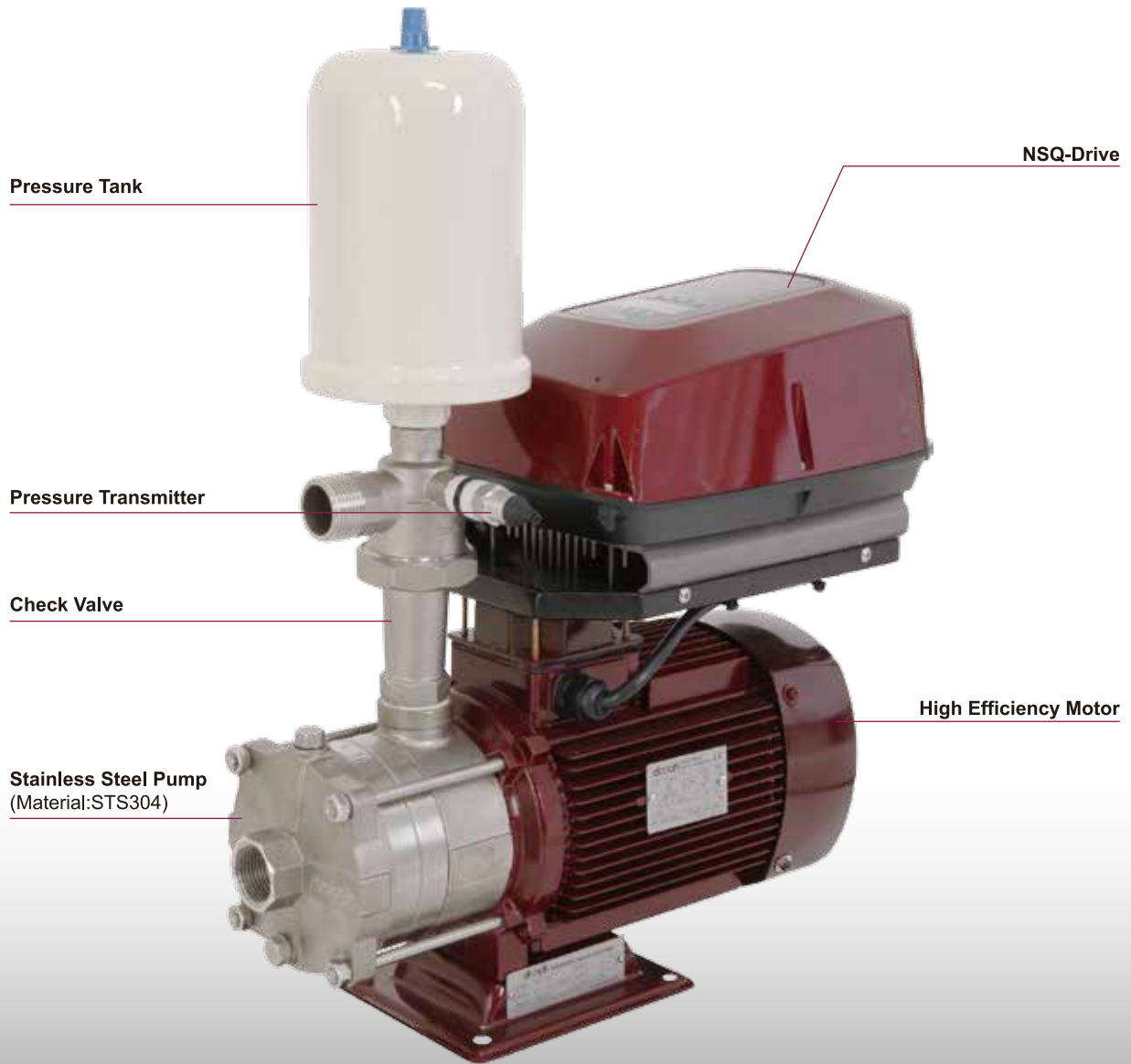
### Outline Drawing



### Dimension / Weight

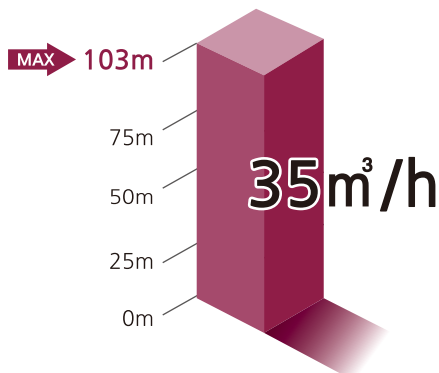
MODEL	DIAMETER		POWER		SIZE (mm)				WEIGHT (kg)
	INLET	OUTLET	kW	HP	L1	L2	L3	H	
DHM20-1.5	50A	32A	1.5	2	405.5	127	54	248	20
DHM20-2.2	50A	32A	2.2	3	405.5	127	54	248	23

**NSQ-DHF(T) Series**



### Specification

- Max. Flow(Q) : 35m<sup>3</sup>/h
- Max. Head(H) : 103m<sup>3</sup>/h
- Motor Power : 0.55~7.5kW (0.75~10HP)
- Input Power : 3PH 380V~440V / 60Hz (0.75~10HP)



### NSQ-DHF(T) Series

NSQ-DHF(T) series is built on the basis of DHF pumps. The main difference between the DHF and the NSQ-DHF(T) series is the variable frequency drive. Enhanced with the NSQ-Drive, NSQ-DHF(T) series with the appropriate sensor is turned into an intelligent, variable speed pumping system. The NSQ-Drives adjust the motor speed which in turn provides constant pressure or differential pressure to the flow rate.

- ※ Inlet/Outlet casing material  
"T" indicates : GCD450  
Without "T" indicates : Stainless steel

### Functions

- Control Mode - Pressure/ differential pressure
- Set the setting pressure
- Dry-running and freeze protection
- Automatic flowless sensor
- Automatic recovery after power failure Inverter
- Pump protection
- FND - Status monitoring

### Features

- Each pump is individually controlled by a NSQ drive
- High reliability (Multi-master control)
- Constant discharge pressure
- Less wear of the system during operation
- Compact assembly and installation

### Applications

- Pressure boosting systems
- Domestic water supply systems
- Cooling systems
- Air-conditioning systems
- Small industrial water supply systems
- Horticultural irrigation systems

**SQ2-DHF(T) Series**

Pressure Tank

SQ2-Drive

Pressure Transmitter

Check Valve

Stainless Steel Pump  
(Material:STS304)

High Efficiency Motor

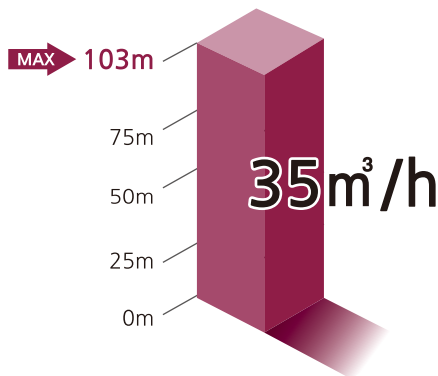


## SQ2-DHF(T) Series

INDIVIDUAL INVERTER HORIZONTAL PUMP

### Specification

- Max. Flow(Q) : 35m<sup>3</sup>/h
- Max. Head(H) : 103m
- Motor Power : 0.37~2.2kW (0.5~3HP)
- Input Power : 1PH 200V~230V / 60Hz (0.5~3HP)



### SQ2-DHF(T) Series

SQ2-DHF(T) series is built on the basis of DHF pumps. The main difference between the DHF and the SQ2-DHF(T) series is the variable frequency drive. Enhanced with the SQ2-Drives, SQ2-DHF(T) series with the appropriate sensor is turned into an intelligent, variable speed pumping system. The SQ2-Drives adjust the motor speed which in turn provides constant pressure or differential pressure to the flow rate.

- ※ Inlet/Outlet casing material  
"T" indicates : GCD450  
Without "T" indicates : Stainless steel

### Functions

- Control Mode - Pressure/ differential pressure
- Set the setting pressure
- Dry-running and freeze protection
- Automatic flowless sensor
- Automatic recovery after power failure Inverter
- Pump protection
- FND - Status monitoring

### Features

- Each pump is individually controlled by a SQ2 Drive
- High reliability (Multi-master control)
- Constant discharge pressure
- Less wear of the system during operation
- Compact assembly and installation

### Applications

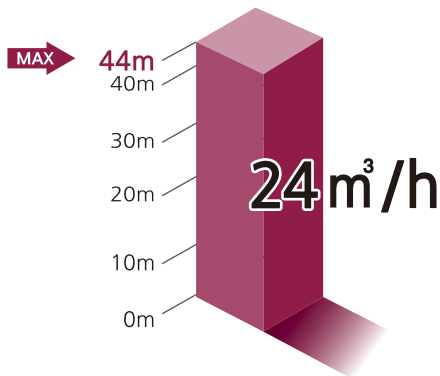
- Pressure boosting systems
- Domestic water supply systems
- Cooling systems
- Air-conditioning systems
- Small industrial water supply systems
- Horticultural irrigation systems

**NSQ-DHM Series**



## Specification

- Max. Flow(Q) : 24m<sup>3</sup>/h
- Max. Head(H) : 44m
- Motor Power : 0.75~2.2kW (1~3HP)
- Input Power : 3PH 380V~440V / 60Hz (1~3HP)



## NSQ-DHM Series

NSQ-DHM series is built on the basis of DHM pumps. The main difference between the DHM and the NSQ-DHM series is the variable frequency drive. Enhanced with the NSQ-Drive, NSQ-DHM series is with the appropriate sensor is turned into an intelligent, variable speed pumping system. The NSQ-Drives adjust the motor speed which in turn provides constant pressure or differential pressure to the flow rate.

## Functions

- Control Mode - Pressure/ differential pressure
- Set the setting pressure
- Dry-running and freeze protection
- Automatic flowless sensor
- Automatic recovery after power failure Inverter
- Pump protection
- FND - Status monitoring

## Features

- Each pump is individually controlled by a NSQ drive
- High reliability (Multi-master control)
- Constant discharge pressure
- Less wear of the system during operation
- Compact assembly and installation

## Applications

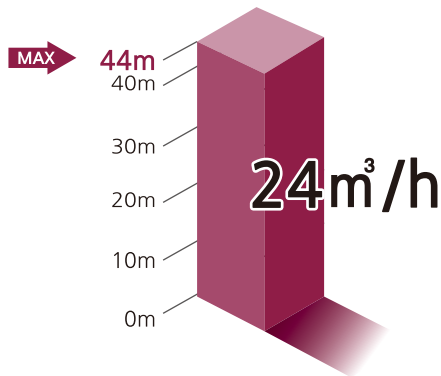
- Pressure boosting systems
- Domestic water supply systems
- Cooling systems
- Air-conditioning systems
- Small industrial water supply systems
- Horticultural irrigation systems

**SQ2-DHM Series**



## Specification

- Max. Flow(Q) : 24m<sup>3</sup>/h
- Max. Head(H) : 44m
- Motor Power : 0.75~2.2kW (1~3HP)
- Input Power : 1PH 200V~230V / 60Hz (1~3HP)



## SQ2-DHM Series

SQ2-DHM series is built on the basis of DHM pumps. The main difference between the DHM and the SQ2-DHM series is the variable frequency drive. Enhanced with the SQ2-Drive, SQ2-DHM series with the appropriate sensor is turned into an intelligent, variable speed pumping system. The SQ2-Drive adjust the motor speed which in turn provides constant pressure or differential pressure to the flow rate.

## Functions

- Control Mode - Pressure/ differential pressure
- Set the setting pressure
- Dry-running and freeze protection
- Automatic flowless sensor
- Automatic recovery after power failure Inverter
- Pump protection
- FND - Status monitoring

## Features

- Each pump is individually controlled by a SQ2 drive
- High reliability (Multi-master control)
- Constant discharge pressure
- Less wear of the system during operation
- Compact assembly and installation

## Applications

- Pressure boosting systems
- Domestic water supply systems
- Cooling systems
- Air-conditioning systems
- Small industrial water supply systems
- Horticultural irrigation systems