

**LAIKO**



**KWD**

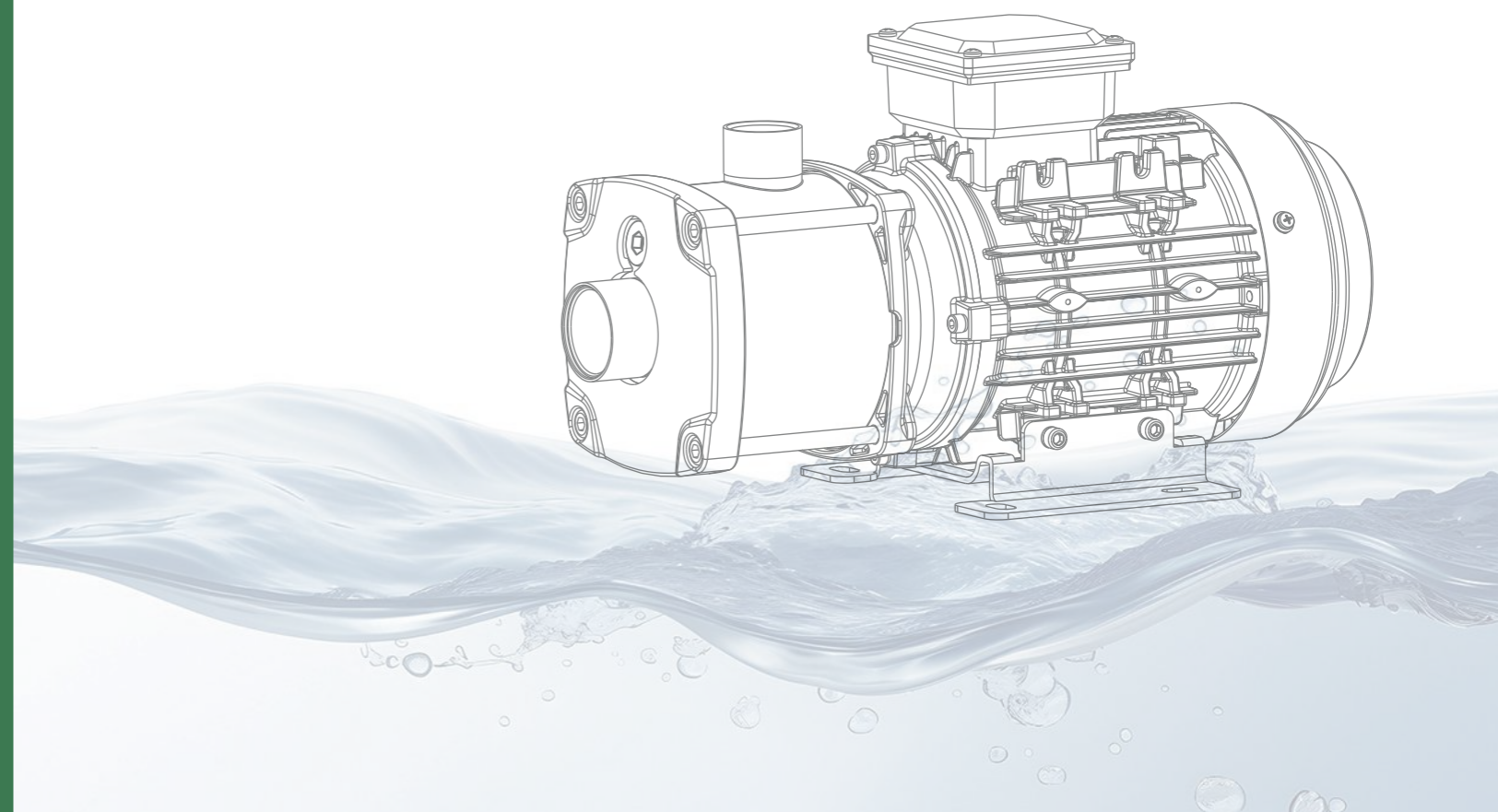
**HORIZONTAL MULTI-STAGE  
CENTRIFUGAL PUMP SERIES**

**LAIKO**

**KWD**

Horizontal Multi-Stage Centrifugal Pump Series

PUMP AND SYSTEM SOLUTION PROVIDER



Superior in Pump, Superior in Energy-Saving.

[www.Laikopump.com](http://www.Laikopump.com)



## **LAIKO** Laiko Pump Pump and System Solution Provider

LAIKO Pump(Zhejiang) Co., Ltd. is a subsidiary of Zhejiang Dayuan Pumps Industrial Co., Ltd. (Stock code: 603757), focusing on the research and manufacturing of energy-saving pumps.

LAIKO's applications cover the fields of construction, municipal, and industrial sectors. Currently, we have product lines including Inline Multistage Pumps, Inline Circulation Pumps, Horizontal Multistage Pumps, Cold and Hot Water Circulation Pipeline Pumps, Single-Stage Centrifugal Pumps, Standard Centrifugal Pumps, Stainless steel Horizontal Single-Stage Centrifugal Pumps, Submersible Sewage Pumps, and Immersed Multistage Centrifugal Pumps. Our products are exported to many countries and regions in Europe, America, and Asia, meeting local legal requirements and obtaining recognition from clients.

A standard research and development, production, sales, and service system has laid the core competitiveness and sustainable development space for LAIKO. Reliable product quality and thoughtful after-sales service have earned LAIKO widespread reputation.

LAIKO maintains a pioneering spirit, always adheres to the concept of technological innovation, and never stops exploring energy-saving endeavors!

### **Research and manufacturing of energy-saving pumps, providing pump and system solutions**

With over 34 years of accumulated strength, we have formed an alliance with top domestic water pump research and development, production, sales, and technical teams, Established Zhejiang Laiko Pump Industry Co., Ltd. (referred to as Zhejiang Leike), with comprehensive strength ranking among the top in the industry.

The second-generation green intelligent factory of Industry 4.0 standard covers an area of nearly 200 acres, with an annual output of over 7 million units and a total investment of over 1 billion yuan.

Zhejiang Laiko has established a comprehensive sales and service network nationwide, with direct offices in major cities. Our products are exported to multiple countries and regions in Europe, America, and Asia. China Laiko pumps globally.



### **GREEN SMART FACTORY**

Dayuan Pump Group and its subsidiary Laiko Pump Industry have implemented a significant strategic layout. Covering an area of nearly 200 acres with a total investment of approximately 1 billion RMB, the facility has an annual production capacity of 7 million units. It is a modern integrated factory that combines production, research and development, manufacturing, and logistics.



## R&D STRENGTH

<b>346</b> Domestic patents	<b>29</b> Invention Patent	<b>242</b> New utility patent	<b>75</b> Appearance patent	<b>6</b> Overseas patents
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As a brand under Dayuan Pump Group, we have a strong foundation with over 177 R&D personnel and more than 352 patents. Our products have been honored with titles such as "Zhejiang Famous Brand Product" and "Zhejiang Export Famous Brand," and are exported to multiple countries and regions across Europe, America, and Asia. Our comprehensive strength ranks among the top in the industry. Through years of continuous investment in research and development, we have established a significant technological innovation advantage.

## SERVICE COOPERATION

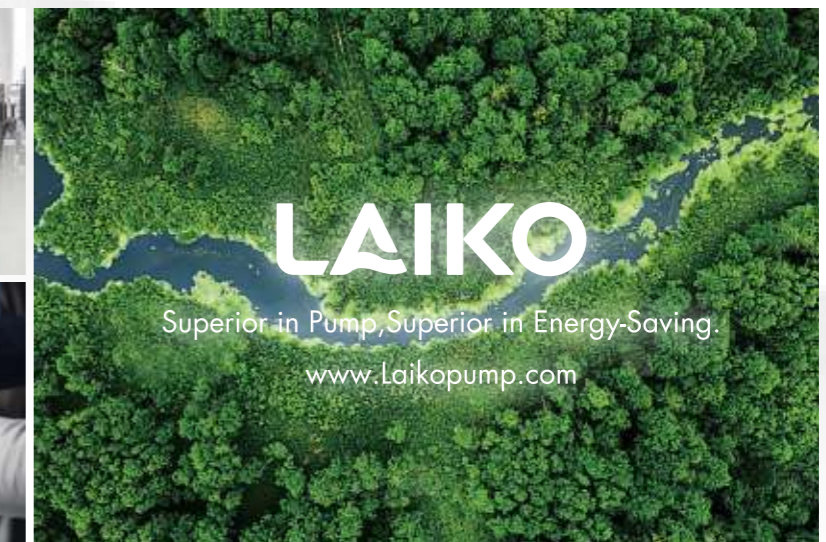
We have established offices in major cities across the country, supported by a professional and efficient service team. From consultation, purchase, after-sales, to maintenance, we provide high-quality, professional, timely, and attentive services at every stage.

Guided by the principle of "wholehearted dedication and customer-first," we respond quickly to customer needs, offering precise product recommendations and tailored solutions. Our comprehensive and full-cycle services ensure a worry-free experience for our customers.

SERVICE TENET: With all our heart and soul, Putting customers first

SERVICE TENET: Rapid response, Precise solution

SERVICE OBJECTIVES: Efficient O&M, Win-Win Cooperation



# LAIKO

## KWD

Horizontal Multi-Stage Centrifugal Pump Series



Superior in Pump, Superior in Energy-Saving.  
[www.laikopump.com](http://www.laikopump.com)

**LAIKO** Laiko Pump (Zhejiang) Co., Ltd.

## KWD

### Horizontal Multi-Stage Centrifugal Pump Series

KWD is a new generation of non self suction horizontal multi-stage centrifugal pump with a brand new industrial appearance design. The pump adopts axial suction and radial discharge, and the key flow components are made of stainless steel stamping and welding technology. Excellent hydraulic performance and unique structural design, characterized by high efficiency, low noise, low vibration, stability and reliability, resistance to mild corrosion, compact structure, beautiful appearance, small size, light weight, and easy maintenance, achieve efficient operation of fluid transportation in various scenarios, and effectively reduce the operating costs of users' pumps. Operating conditions: a liquid that is thin, clean, non corrosive, non flammable, non explosive, easily vaporized, and does not contain solid particles or fibers; When the density of the conveyed medium is greater than that of clean water, a high-power motor is required. Please consult our company for details. Liquid temperature range:

Room temperature type: -20 °C~+70 °C

Hot water type: -20 °C~+105 °C

Maximum operating pressure: 10 bar

Maximum altitude: 1000m

Maximum ambient temperature: +40 °C

Medium pH value: 3~9

#### APPLICATION FIELD

Cooling System

Air Conditioning System

Water Treatment (purification of water)

Industrial Cleaning System

Transport, Circulation, and Lifting of Liquids

Hot and Cold Water

Food and Beverage

Pharmaceutical Industry

#### TECHNICAL DATA

Flow range: 0.4~29m<sup>3</sup>/h

Head range: 5~87m

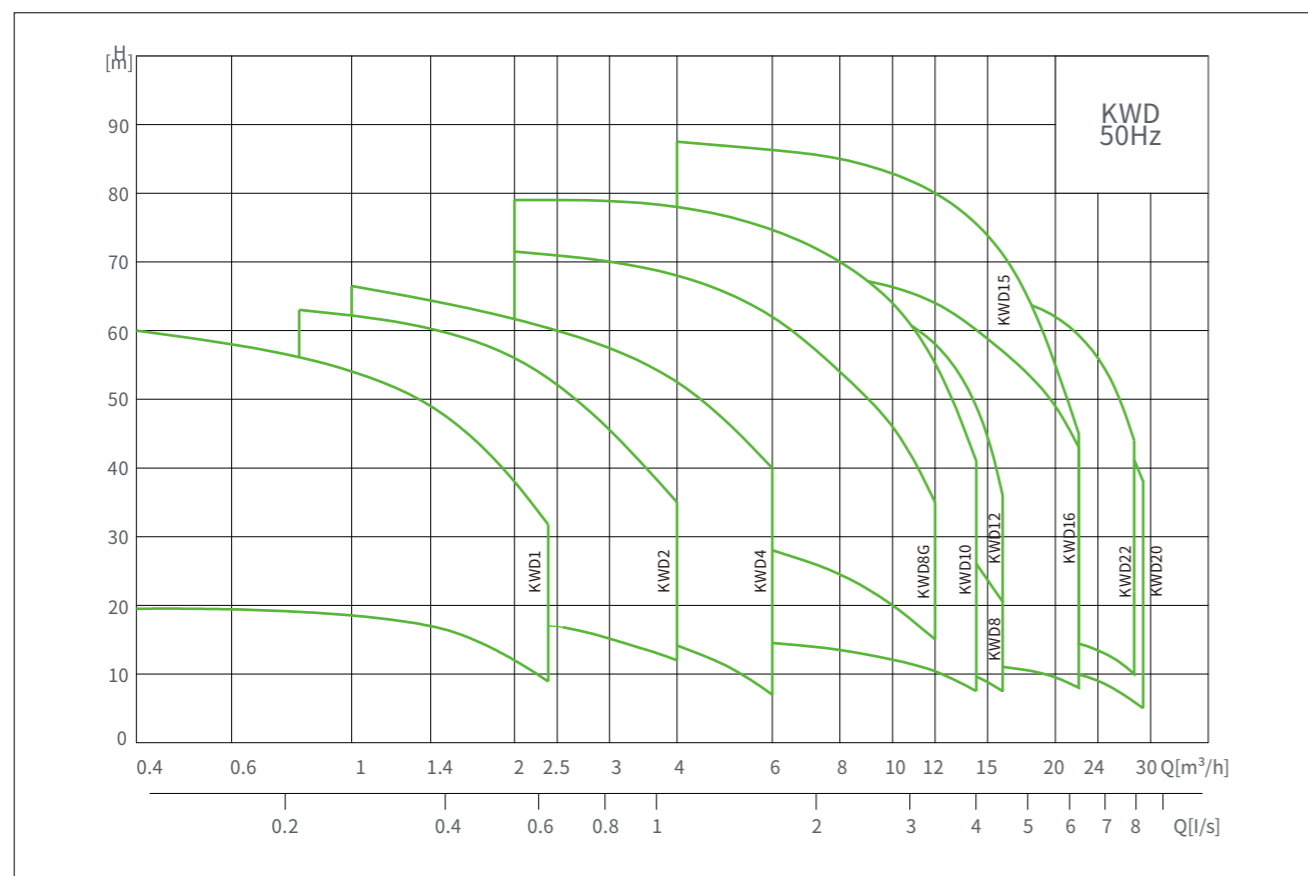
Power range: 0.25~7.5kW

Fully enclosed standard air-cooled secondary standard motor

Protection level: IP55

Insulation level: F

Performance Range



Product Overview

KWD is a horizontal multi-stage centrifugal pump and suitable for transporting thin, clean, non-corrosive, non-flammable, non-explosive liquids that do not contain solid particles or fibers. It has a wide range of applications, including:

- Cooling system
- Air conditioning system
- Water treatment (purification of water)
- Industrial cleaning system
- Transport, circulation, and lifting of liquids
- Hot and cold water
- Food and beverage, pharmaceutical industry, etc

Curve Conditions

The following notes apply to the performance curves shown later:

- All curves are based on measurements at constant speeds of 2900rpm.
- The curve tolerances comply with ISO9906:2012.
- The test uses 20°C water without air and the kinematic viscosity is 1 mm²/s.
- The pump's usage should refer to the performance range of the bold curve to prevent issues such as overheating due to too low flow or motor overload due to too high flow.

Operating Conditions

Liquids: thin, clean, non-corrosive, non-flammable, non-explosive, and free of solid particles and fibers. When the density of the conveyed medium is greater than that of clean water, a high-power motor is required. For more details, consult us please.

Liquid temperature: common temperature type: -20°C~+70°C; hot water type: -20°C~+105°C

Altitude: up to 1000m

Maximum ambient temperature: +40°C

Maximum working pressure: 10bar

Motor

The pump is equipped with fully enclosed, air-cooled, squirrel-cage motor.

Protection level: IP55

Insulation level: F

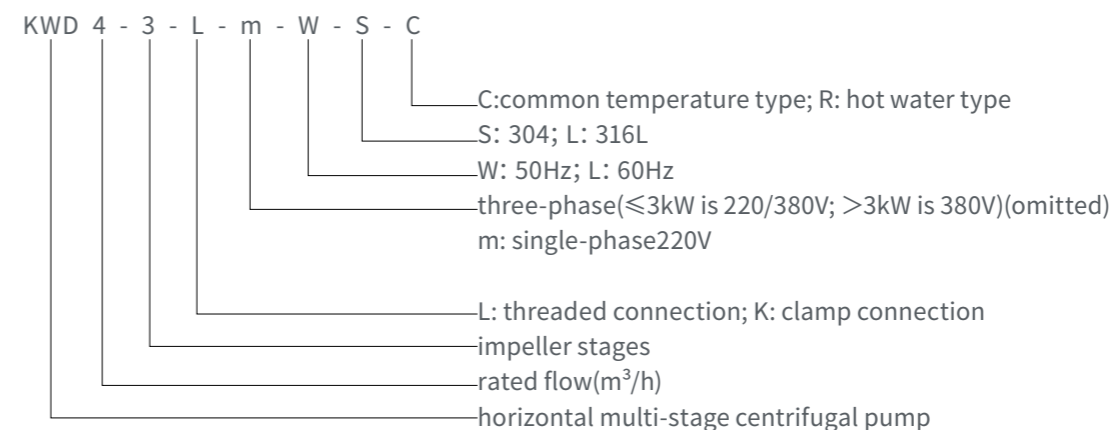
Standard voltage: 1×220, 50Hz

3×380, 50Hz

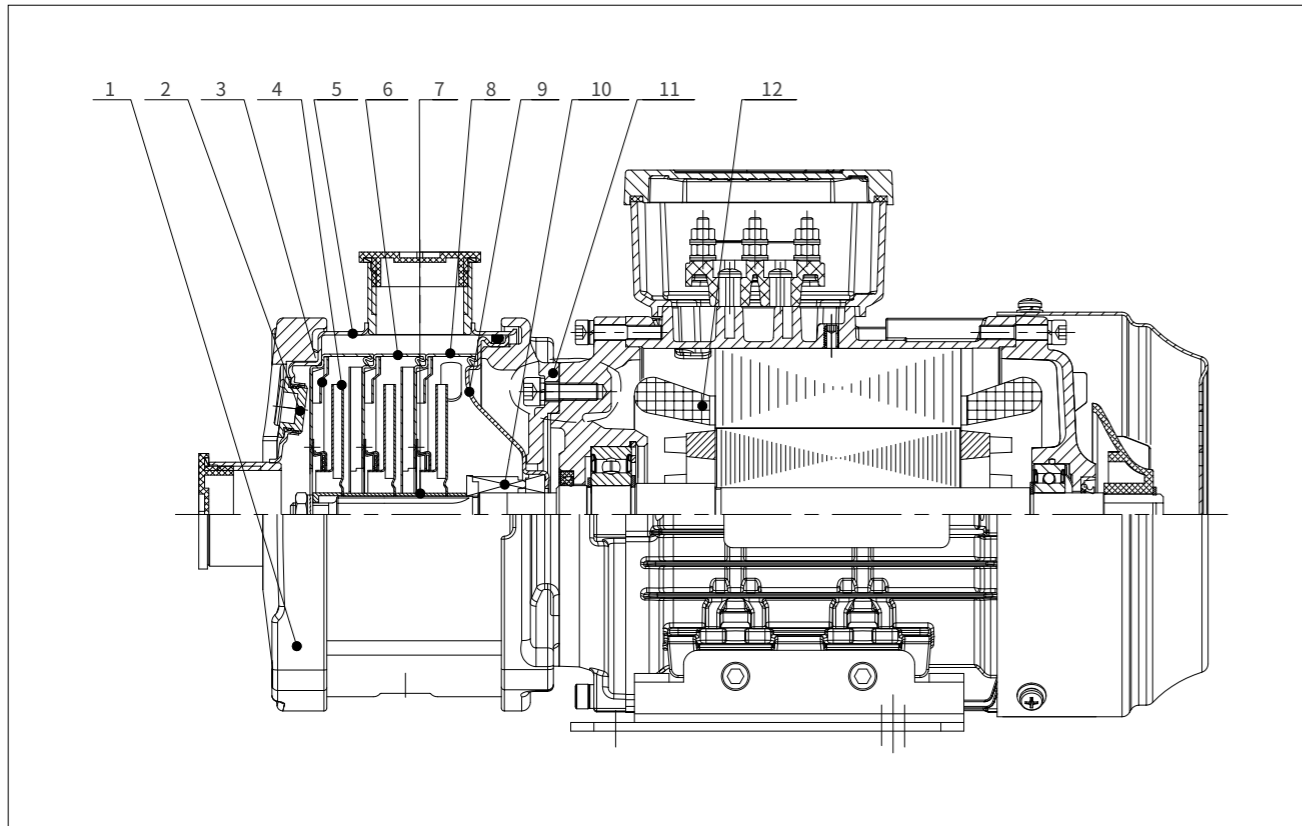
The maximum power of single-phase motor is 2.2kW.

Single-phase motor is equipped with built-in thermal overload protection, and three-phase motor must be connected to a motor starter according to local regulations.

Model Description

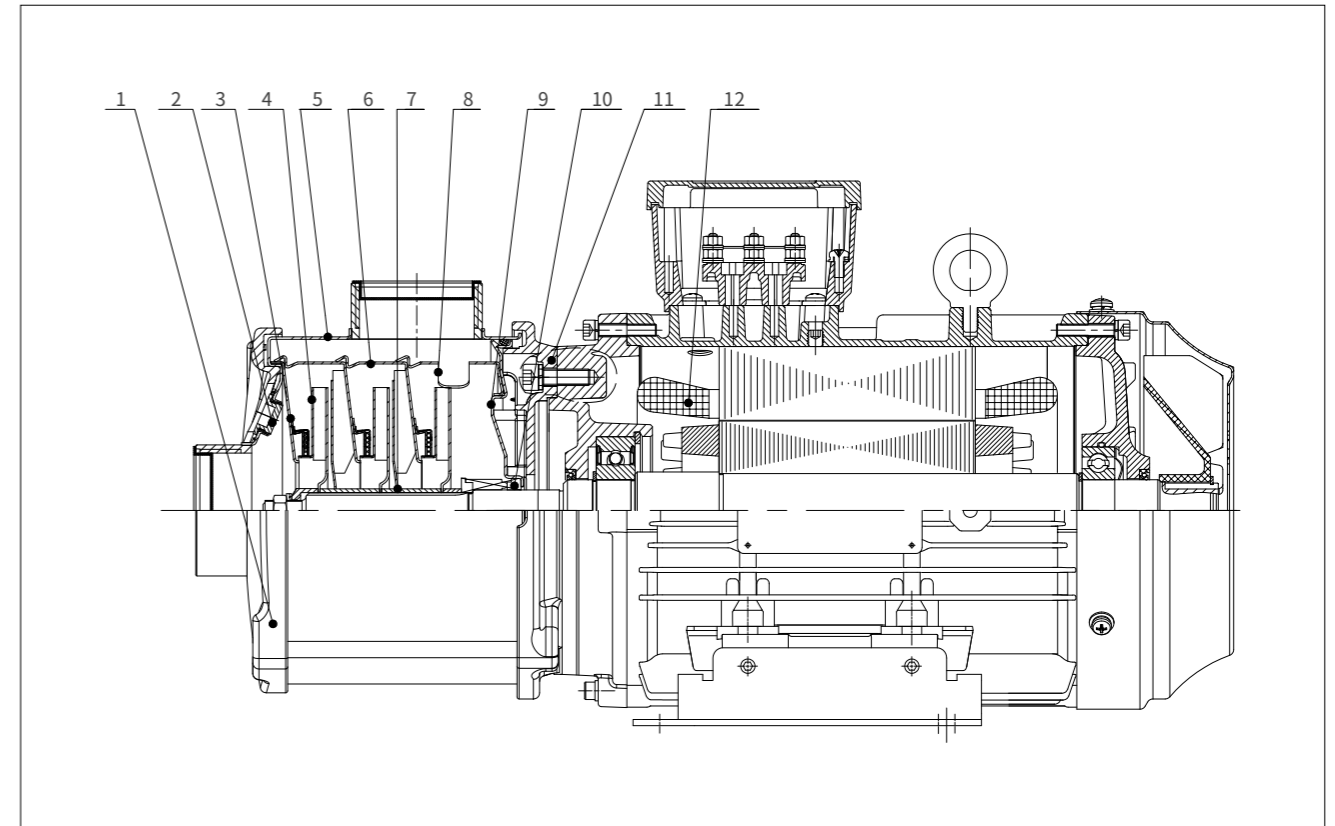


KWD1, 2, 4 Structure Diagram



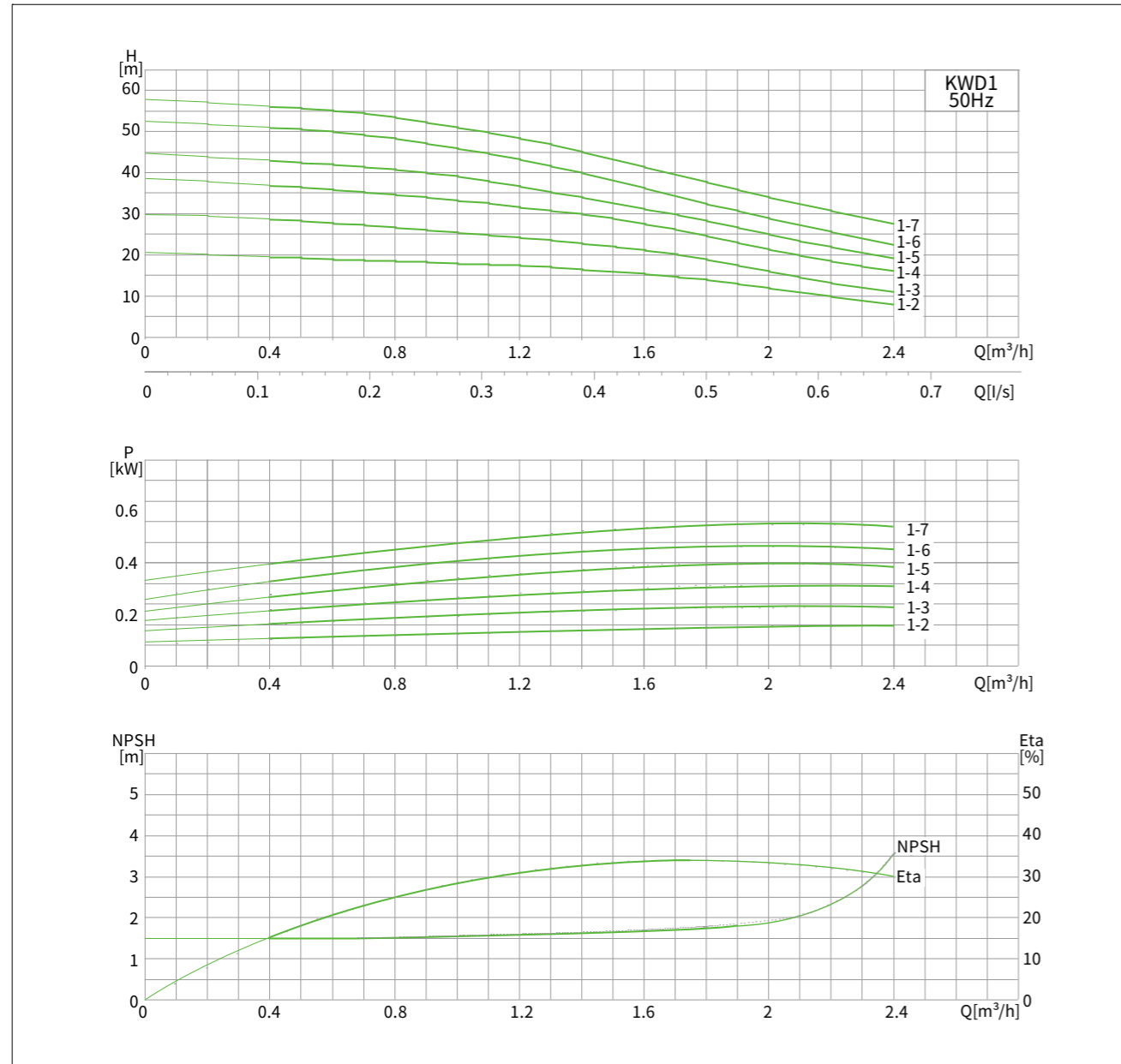
No.	Name	Material	GB	AISI/ASTM
1	Pump cover	Die-cast aluminum	GB/T 15115-YL113	ASTM383.1
2	PulG3/8	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
3	First diffuser	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
4	Impeller	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
5	Pump body	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
6	Medium diffuser	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
7	Spindle sleeve	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
8	Final diffuser	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
9	Mechanical seal	/	/	/
10	Connecting cover	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
11	Connect	Die-cast aluminum	GB/T 15115-YL113	ASTM383.1
12	Motor	/	/	/

KWD8, 10, 12, 15, 16, 20, 22 Structure Diagram



No.	Name	Material	GB	AISI/ASTM
1	Pump cover	Die-cast aluminum	GB/T 15115-YL113	ASTM383.1
2	PulG3/8	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
3	First diffuser	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
4	Impeller	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
5	Pump body	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
6	Medium diffuser	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
7	Spindle sleeve	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
8	Final diffuser	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
9	Mechanical seal	/	/	/
10	Connecting cover	Stainless steel	GB/T 20878-06Cr19Ni10	AISI304
11	Connect	Die-cast aluminum	GB/T 15115-YL113	ASTM383.1
12	Motor	/	/	/

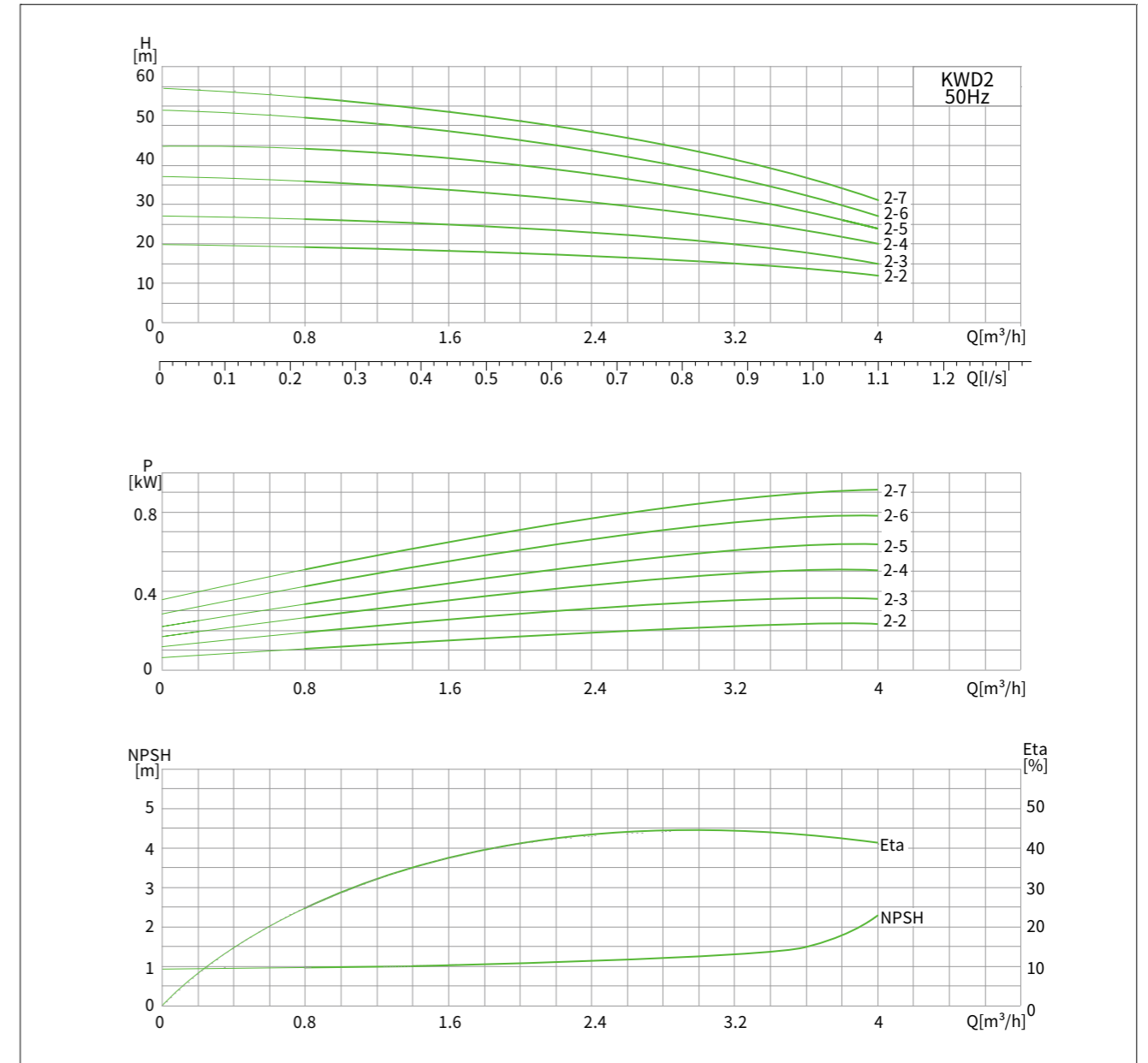
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	0.4	0.6	0.8	1	1.2	1.4	1.6	1.8	2	2.2	2.4
KWD1-2	0.25	H(m)	19.5	19	18.5	18	17.5	17	15	14	12	12	12
KWD1-3	0.25		29	28.5	26	25	24.5	23.5	21	19	16	17	16
KWD1-4	0.37		37	36	35	33	32	30	27	26	20	22	20
KWD1-5	0.45		43	42	41	40	36	34	29	27	22	25	22
KWD1-6	0.45		51	50	49	46	44	42	36	32	26	30	26
KWD1-7	0.55		60	58	56	53	51	49	45	42	38	34	30

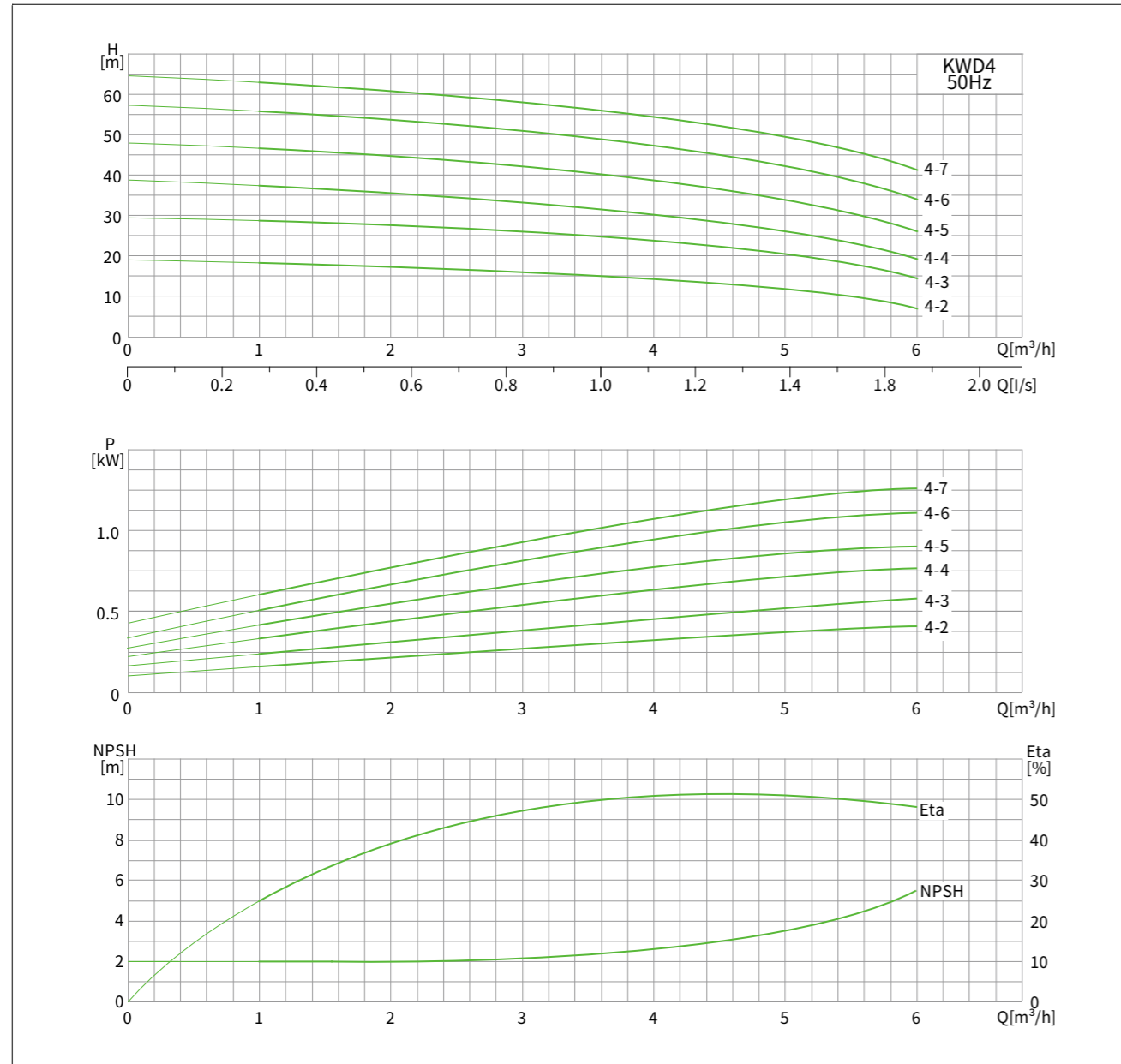
Performance Curve Description



Performance Curve Description

Model	Power[kW]	Flow(m³/h)	0.8	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.0
KWD2-2	0.37	H(m)	19.5	19	18.5	18	17	16.5	14.5	13.5	12
KWD2-3	0.37		27	26	25	24	23	22	20	17	15
KWD2-4	0.55		36	35	34	32	31	29	27	23	20
KWD2-5	0.55		44	43	42	40	38	36	33	28.5	24
KWD2-6	0.75		53	51.5	48	47	45	41	36	31.5	27
KWD2-7	1		63	61	59	56	54	51	47	41	35

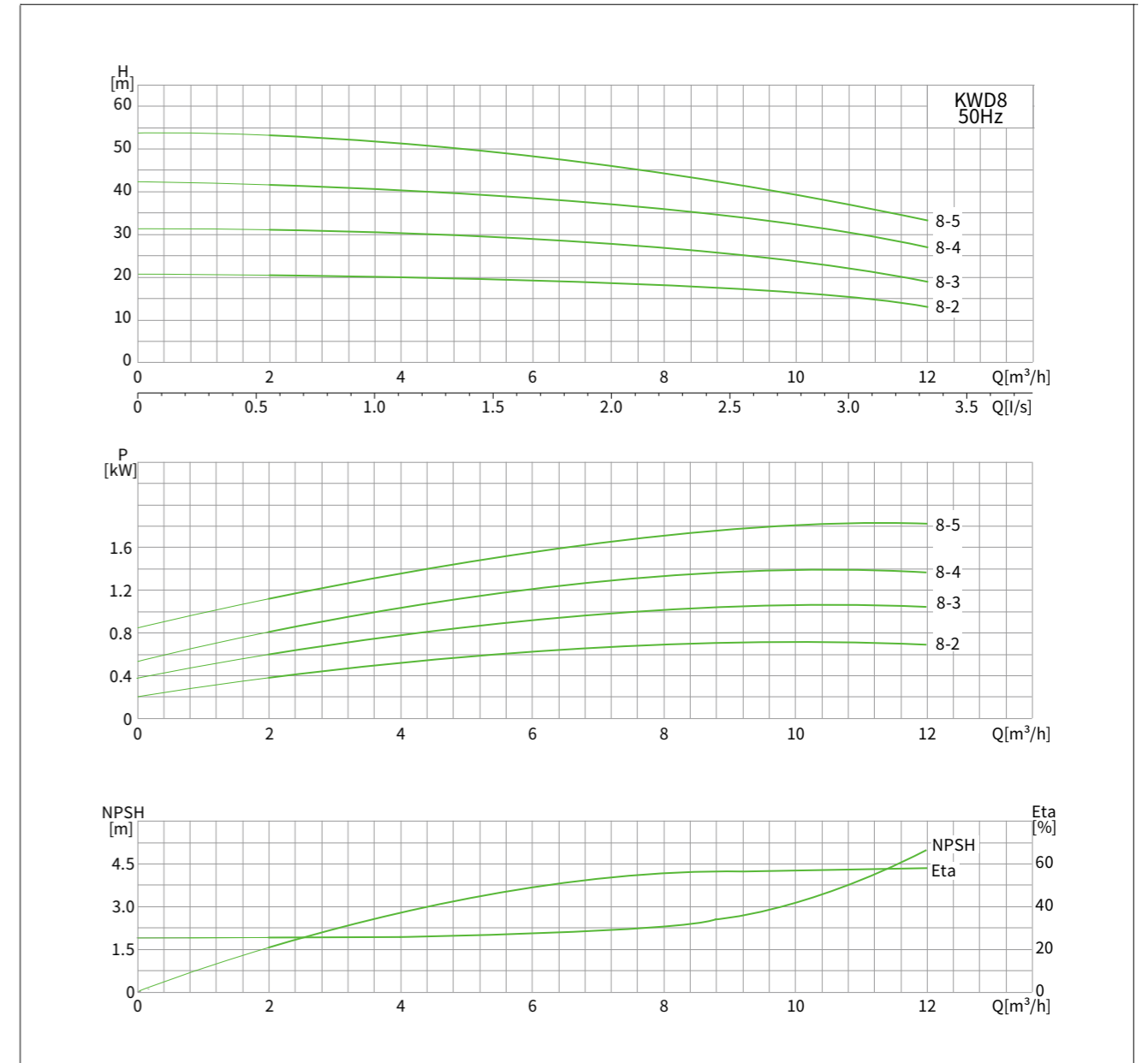
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	1.0	1.6	2.2	2.8	3.4	4.0	4.6	5.2	5.8	6.0
KWD4-2	0.37	H(m)	18.5	18	17	16	15.5	15	13.5	12	8	7
KWD4-3	0.55		29	28.5	28	26	25.5	25	23	21	16	14
KWD4-4	0.75		38	37	36	33	32	30	28	26	20	18
KWD4-5	1		47	46	45	43	41	40	36	34	28	25
KWD4-6	1.3		56.5	55	54	52	51	49	45	42	36	33
KWD4-7	1.5		69	67	66	64	62	61	57	53	47	31.5

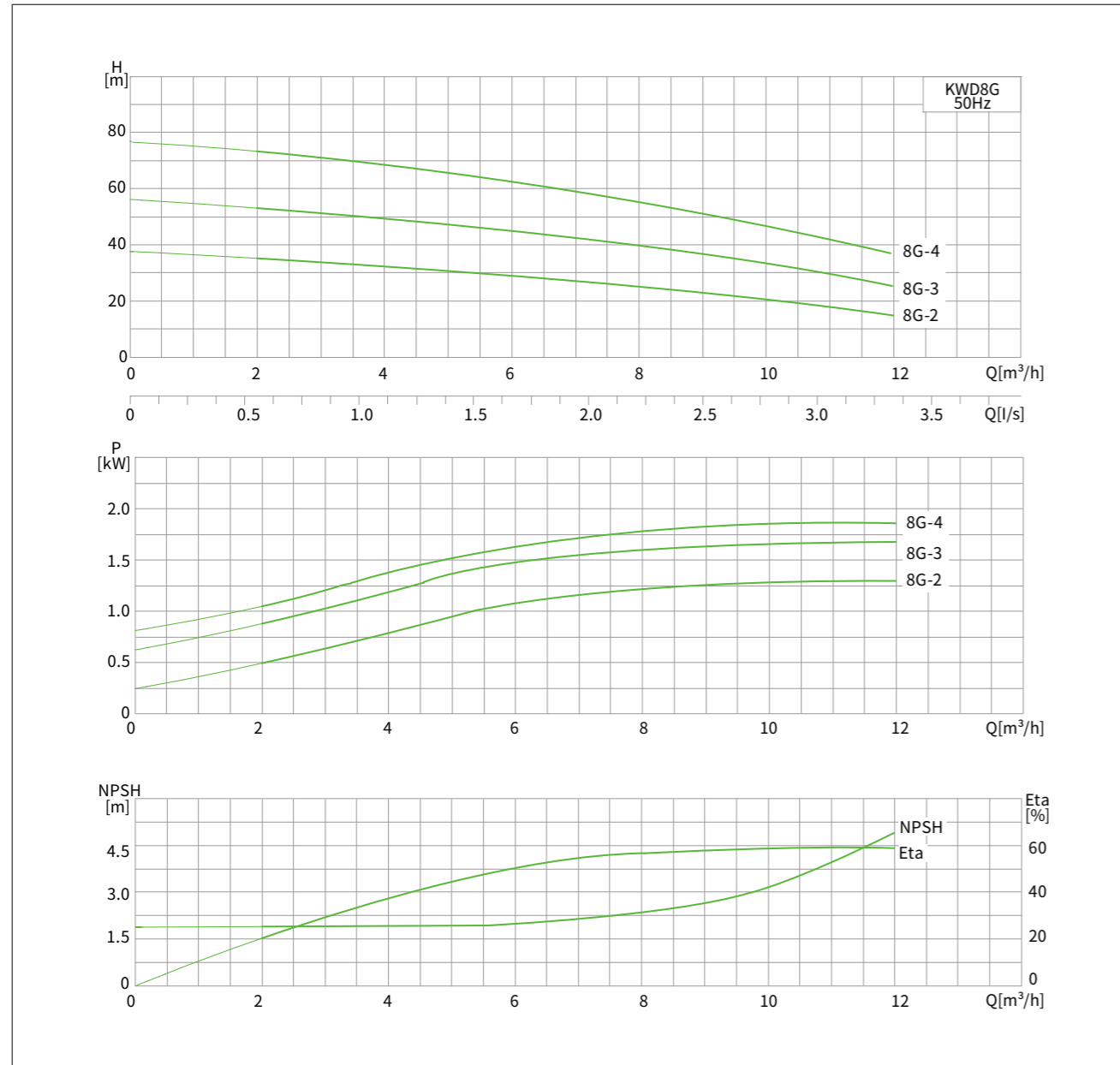
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0
KWD8-2	0.75	H(m)	20.5	20	19.5	18	16	13	9.5	6.5
KWD8-3	1		31	30	29.5	27	24	19	15.5	11
KWD8-4	1.5		42	40.5	39.5	36	32	26	22	15.5
KWD8-5	2.2		53	51	50	45	40	32	29	20.5

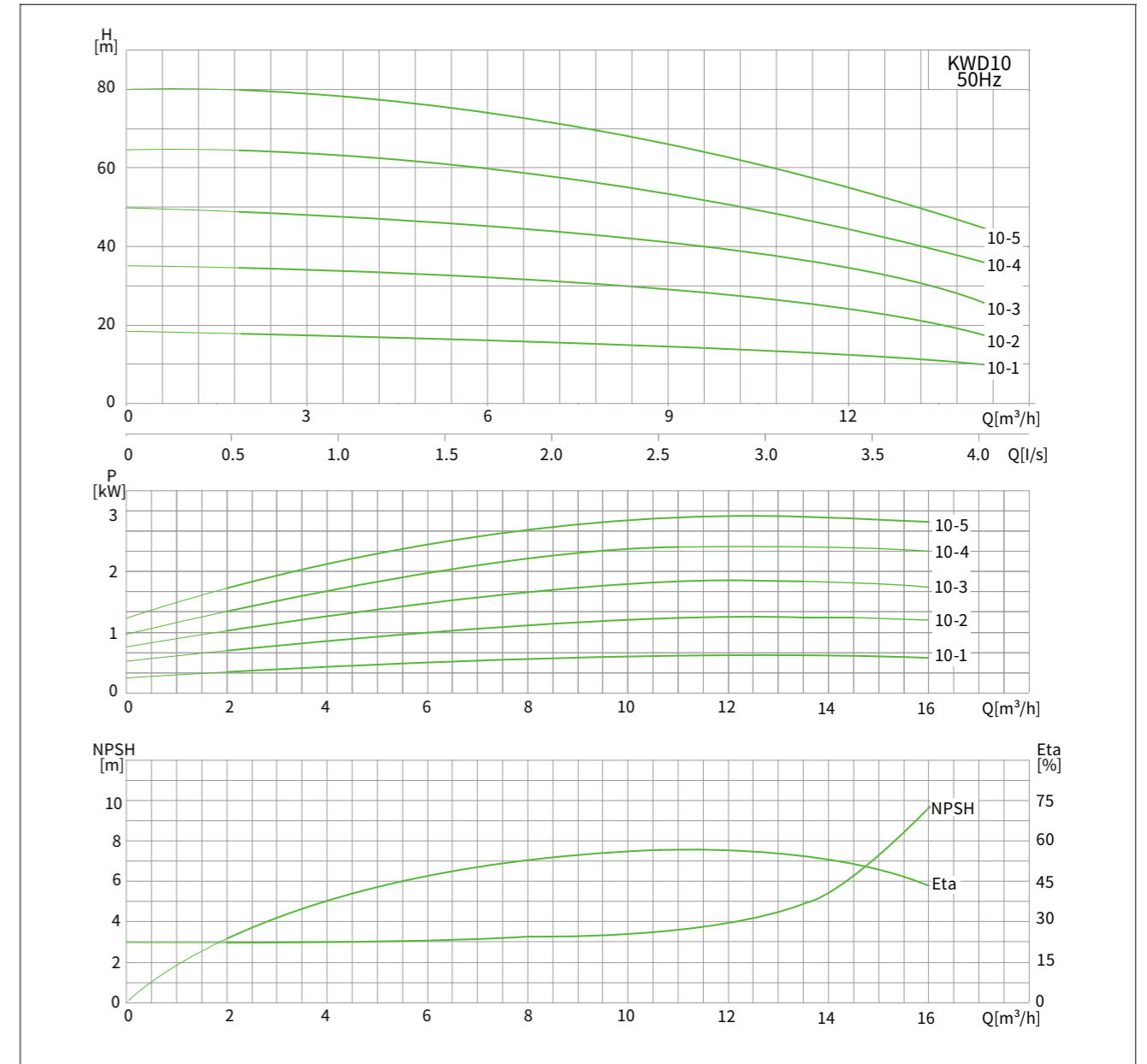
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	2.0	4.0	6.0	8.0	10.0	12.0
KWD8G-2	1	H(m)	34	31.5	28	24.5	20	15
KWD8G-3	1.85		53.5	50	45.5	40	33	25.5
KWD8G-4	2.2		71.5	68	62	54	46	35

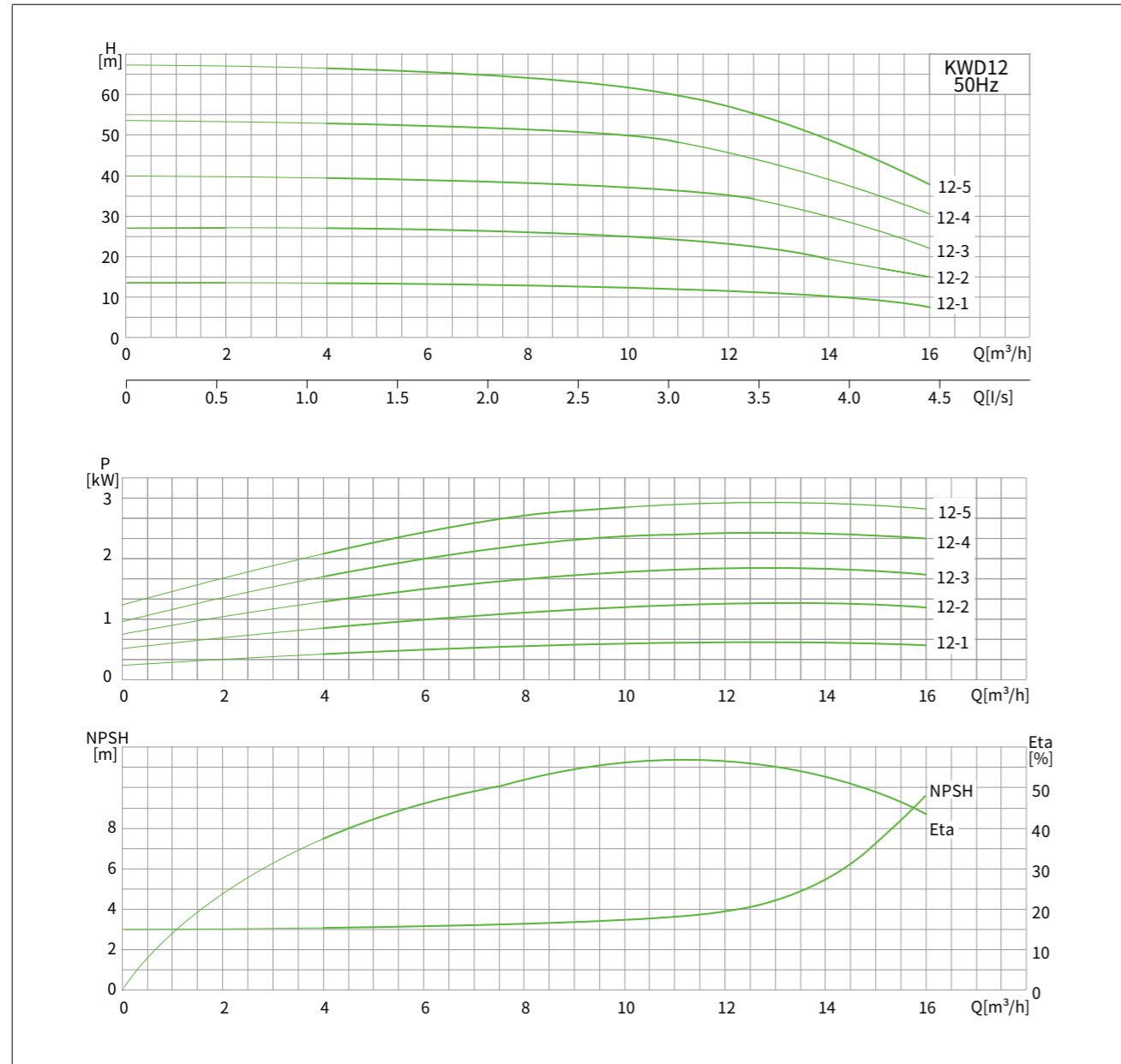
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	2.0	4.0	6.0	8.0	10.0	12.0	14.0
KWD10-1	0.75	H(m)	15.5	15	14.5	13.5	12	10.5	7.5
KWD10-2	1.3		31.5	31	29.5	27	25	21	16
KWD10-3	2.2		47.5	47	45.5	43	38	33	26
KWD10-4	2.7		63	62	60	56	51	44	33
KWD10-5	3		79	78	74	70	64	54	41

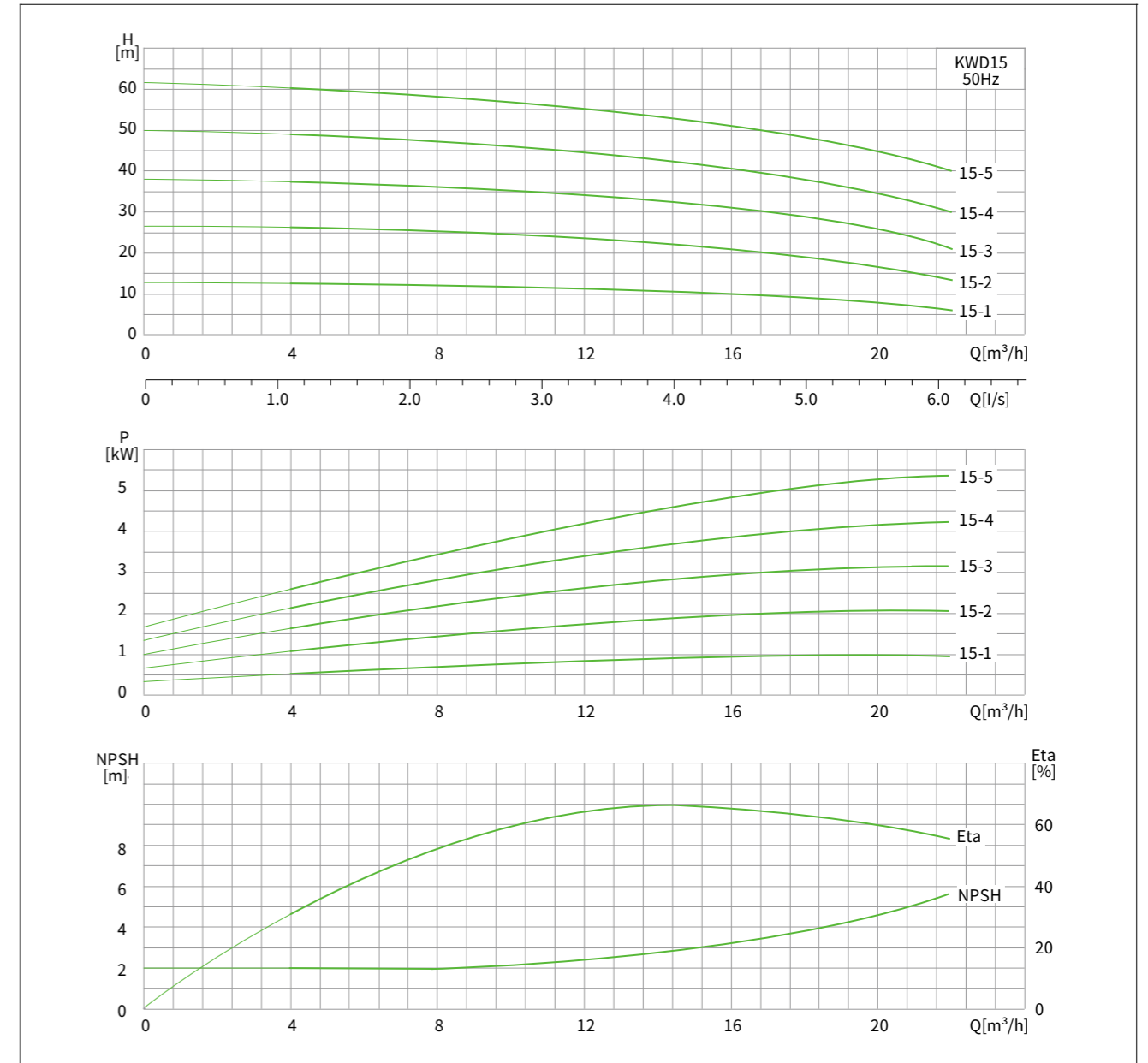
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	4.0	8.0	10.0	12.0	14.0	16.0
KWD12-1	0.75	H(m)	13.2	13	12.5	12	10	7.5
KWD12-2	1.3		26.5	26	25.5	24	20	15
KWD12-3	2.2		39.5	39	38	36	30	22
KWD12-4	2.7		53	52	50	47	39	29
KWD12-5	3		66.5	65	63	58	49	36

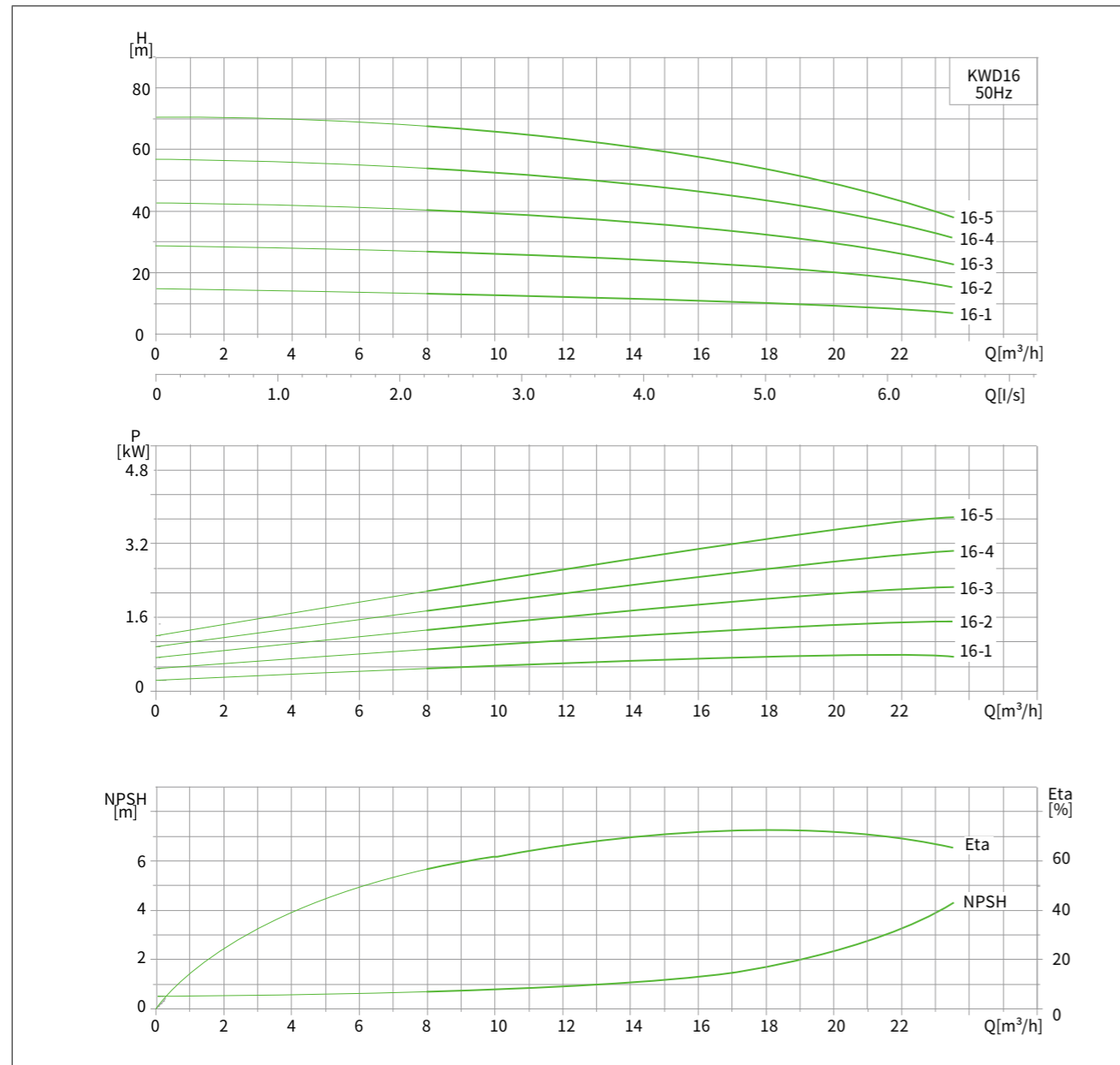
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	4.0	6.0	8.0	10.0	12.0	15.0	18.0	20.0	22.0
KWD15-1	1.3	H(m)	17	16.8	16.5	16	15.5	15	13	10	8
KWD15-2	2.2		35	34.5	34	33.5	32	30	26	22	18
KWD15-3	3.5		50	49	48	47.5	46	45	40	34	28
KWD15-4	5.5		70	69	68	67	64	60	52	44	36
KWD15-5	7.5		87.5	86	85	83.5	80	75	65	55	45

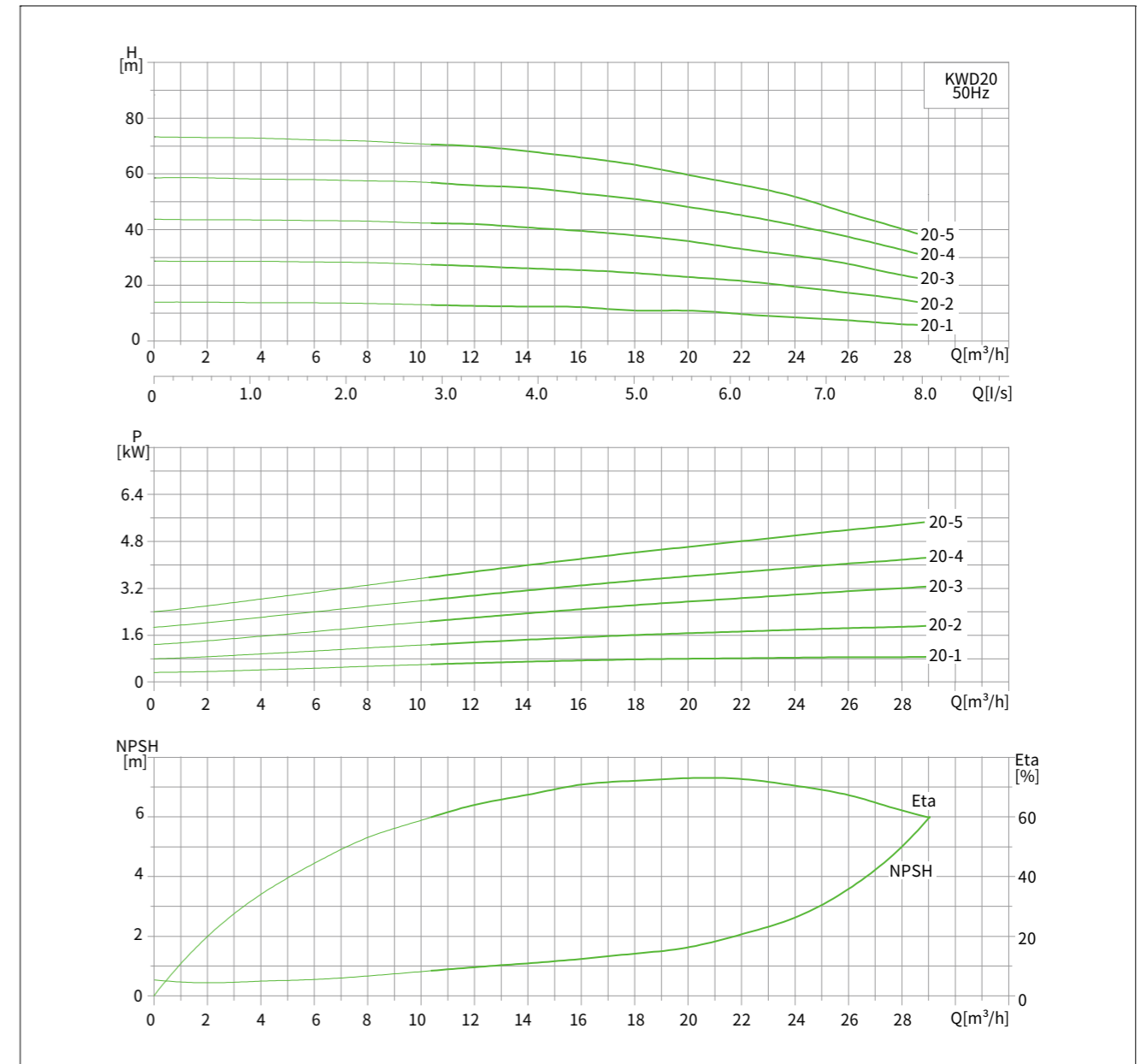
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	8.0	9.0	12.0	15.0	16.0	18.0	20.0	22.0
KWD16-1	1	H (m)	13.5	13	12	11	10.5	10	9.5	8
KWD16-2	1.6		28	26	25	23	21	20	19	17
KWD16-3	2.7		41	40	38	35	33.5	32	29	25
KWD16-4	3.5		56	55	51	47	46	43	39	35
KWD16-5	4		68	66	64	58	56.5	53	49	43

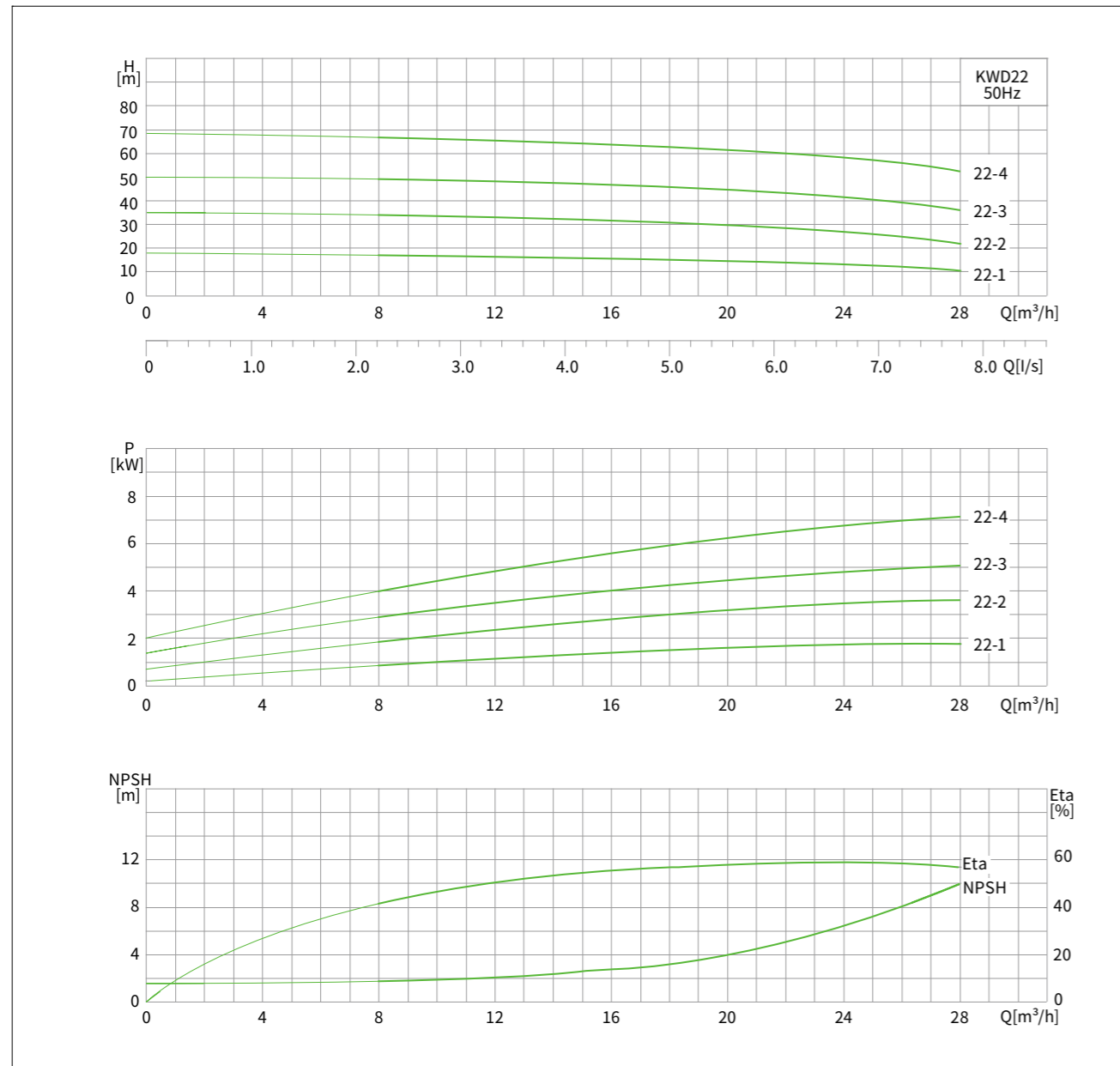
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	10.0	12.0	16.0	18.0	20.0	24.0	26.0	29.0
KWD20-1	1	H(m)	13	13	12	11	10.5	9	8	5
KWD20-2	2.2		28	27	25	24	22.5	19	18	12
KWD20-3	3.5		43	42	39	38	36	30	28	22
KWD20-4	4		54	53	50	48	46	40	36	31
KWD20-5	5.5		71	70	66	63	60	52	46	38

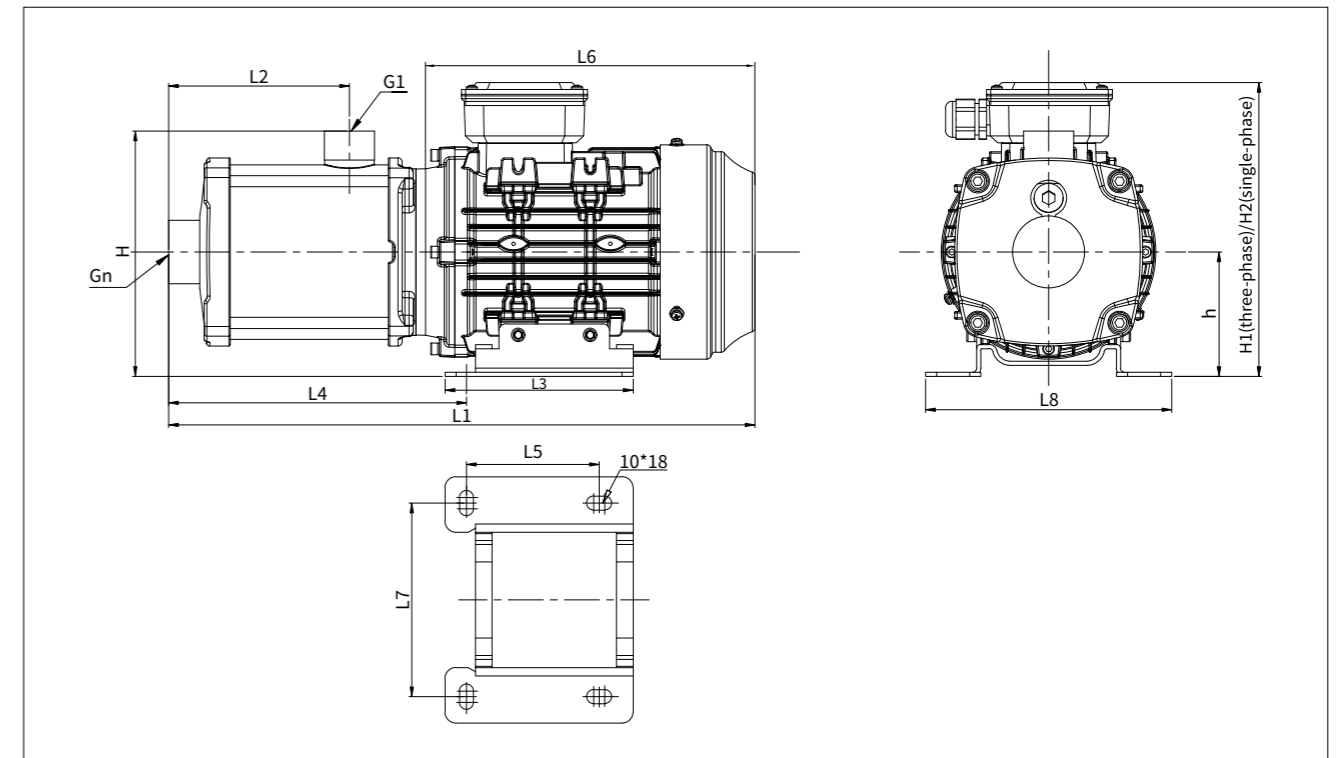
Performance Curve Description



Performance Curve Description

Model	Power [kW]	Flow(m³/h)	8.0	10.0	12.0	16.0	20.0	22.0	24.0	26.0	28.0
KWD22-1	2.2	H(m)	17.5	17	16.5	16	15	14.5	14	12	10
KWD22-2	4		34	33.5	33	32	31	30	28	25	22
KWD22-3	5.5		51	50	49.5	48	46.5	45	42	37.5	33
KWD22-4	7.5		68	67	66	64	62	60	56	50	44

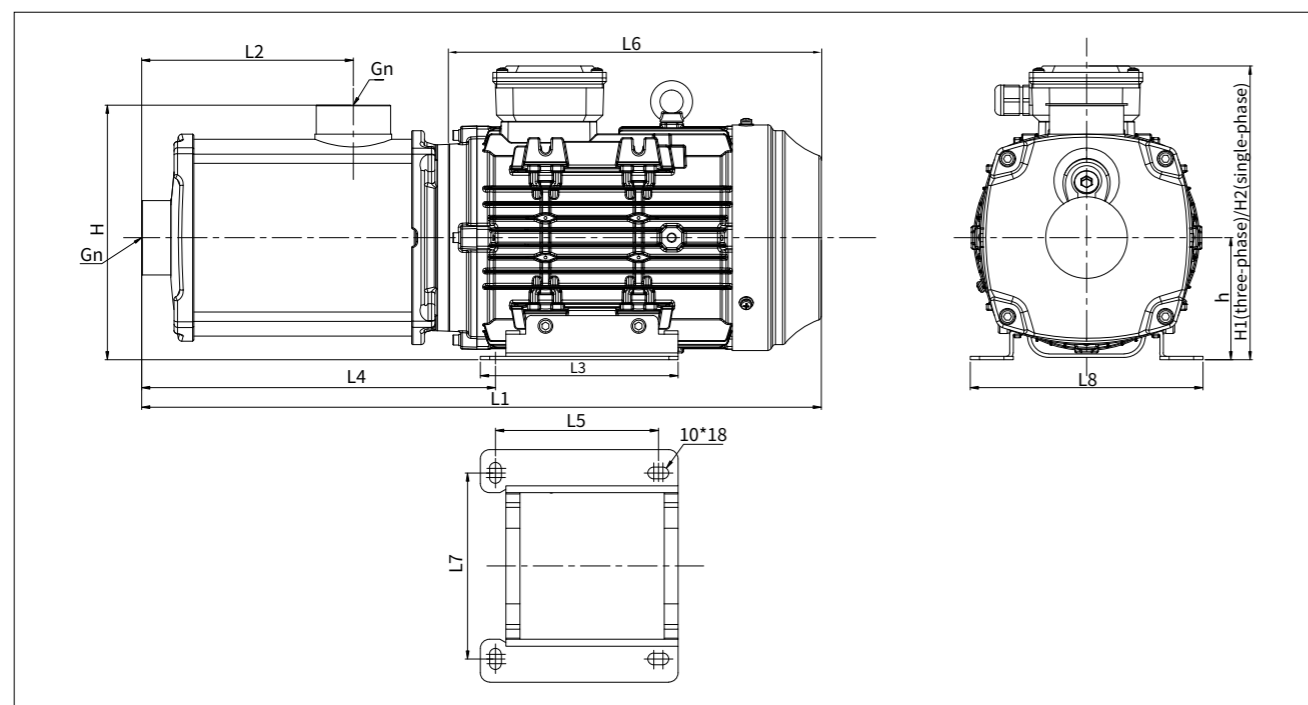
KWD1,2,4 Installation Dimension Description



KWD1,2,4 Dimensions and Weight

Model	Power	Dimension(mm)											Weight (kg)		
		L1 (three phase/ single-phase)	L2	L3	L4	L5	L6 (three phase/ single-phase)	L7	L8	h	H	n		H1 (three phase)	H2 (single-phase)
KWDK1-2	0.25	322.2	72	136	137.1	96	202	125	158	75	163	1	182.5	205.5	7.9
KWDK1-3	0.25	322.2	72	136	137.1	96	202	125	158	75	163	1	182.5	205.5	8
KWDK1-4	0.37	340.2	90	136	155.1	96	202	125	158	75	163	1	182.5	205.5	8.9
KWDK1-5	0.45	358.2	108	136	173.1	96	202	125	158	75	163	1	182.5	205.5	9.6
KWDK1-6	0.45	376.2	126	136	191.1	96	202	125	158	75	163	1	182.5	205.5	10
KWDK1-7	0.55	414.7	144	136	211.6	96	222.5	125	158	75	163	1	191.5	214.5	12.2
KWDK2-2	0.37	322.2	72	136	137.1	96	202	125	158	75	163	1	182.5	205.5	8.5
KWDK2-3	0.37	322.2	72	136	137.1	96	202	125	158	75	163	1	182.5	205.5	8.6
KWDK2-4	0.55	360.7	90	136	157.6	96	222.5	125	158	75	163	1	191.5	214.5	11.2
KWDK2-5	0.55	378.7	108	136	175.6	96	222.5	125	158	75	163	1	191.5	214.5	11.5
KWDK2-6	0.75	396.7	126	136	193.6	96	222.5	125	158	75	163	1	191.5	214.5	12.8
KWDK2-7	1	414.7	144	136	211.6	96	222.5	125	158	75	163	1	191.5	214.5	13.9
KWDK4-2	0.37	322.2	72	136	137.1	96	202	125	158	75	163	11/4	182.5	205.5	8.5
KWDK4-3	0.55	342.7	72	136	140.2	96	222	125	158	75	163	11/4	191.5	214.5	10.9
KWDK4-4	0.75	360.7	90	136	158.2	96	222	125	158	75	163	11/4	191.5	214.5	12.2
KWDK4-5	1	378.7	108	136	176.2	96	222	125	158	75	163	11/4	191.5	214.5	13.3
KWDK4-6	1.3	419.2	126	136	211.2	96	245	140	178	90	178	11/4	213.5	236.5	16.5
KWDK4-7	1.5	437.2/467.2	144	136	229.2	96	245/275	140	178	90	178	11/4	213.5	236.5	17/19.3

KWD8,8G,10,12,15,16,20,22 Installation Dimension Description



Continued table

Model	Power	Dimension(mm)														Weight (kg)
		L1 (three phase/ single-phase)	L2	L3	L4	L5	L6 (three phase/ single-phase)	L7	L8	h	H	n	H1 (three phase)	H2 (single-phase)		
KWDK20-1	1	404.6	87.5	136	196.1	96	245	140	182	100	211	2	223.5	246.5	16.5	
KWDK20-2	2.2	435.1/460.1	87.5	136	201.6	96	275.5/300.5	140	182	100	211	2	230.5	253.5	20.7/24.5	
KWDK20-3	3.5	537.6	133	170	254.6	140	333	160	200	105	216	2	262	/	32.5	
KWDK20-4	4	582.6	178	170	299.6	140	333	160	200	105	216	2	262	/	35.7	
KWDK20-5	5.5	685.6	223	180	343.6	140	391	180	230	120	231	2	290	/	48.1	
KWDK22-1	2.2	450.1/475.1	103	136	216.6	96	275.5/300.5	140	182	100	211	2	230.5	253.5	21.6/25.4	
KWDK22-2	4	507.6	103	170	224.6	140	333	160	200	105	216	2	262	/	34.5	
KWDK22-3	5.5	565.6	103	180	223.6	140	391	180	230	120	231	2	290	/	45.3	
KWDK22-4	7.5	595.6	133	180	253.6	140	391	180	230	120	231	2	290	/	51.8	

KWD8,8G,10,12,15,16,20,22 Dimensions and Weight

Model	Power	Dimension(mm)														Weight (kg)
		L1 (three phase/ single-phase)	L2	L3	L4	L5	L6 (three phase/ single-phase)	L7	L8	h	H	n	H1 (three phase)	H2 (single-phase)		
KWDK8-2	0.75	419.6	103	136	211.1	96	245	140	182	100	210	1 1/2	223.5	246.5	15.5	
KWDK8-3	1	419.6	103	136	211.1	96	245	140	182	100	210	1 1/2	223.5	246.5	16.6	
KWDK8-4	1.5	480.1	133	136	246.6	96	275.5	140	182	100	210	1 1/2	230.5	253.5	19.8/20.4	
KWDK8-5	2.2	510.1/535.1	163	136	276.6	96	275.5/300.5	140	182	100	210	1 1/2	230.5	253.5	22.2/26	
KWDK8G-2	1	419.6	103	136	211.1	96	245	140	182	100	210	1 1/2	223.5	246.5	16.8	
KWDK8G-3	1.85	450.1	103	136	216.6	96	275.5	140	182	100	210	1 1/2	230.5	253.5	20.1/21.2	
KWDK8G-4	2.2	480.1/505.1	133	136	246.6	96	275.5/300.5	140	182	100	210	1 1/2	230.5	253.5	24.1/27.8	
KWDK10-1	0.75	419.6	103	136	211.1	96	245	140	182	100	210	1 1/2	223.5	246.5	14.7	
KWDK10-2	1.3	419.6	103	136	211.1	96	245	140	182	100	210	1 1/2	223.5	246.5	16.5	
KWDK10-3	2.2	450.1/475.1	103	136	216.6	96	275.5/300.5	140	182	100	210	1 1/2	230.5	253.5	20/23.8	
KWDK10-4	2.7	505.1	133	136	246.6	96	300.5	140	182	100	210	1 1/2	230.5	/	24.5	
KWDK10-5	3	560.1	163	162	276.6	122	325.5	140	182	100	210	1 1/2	230.5	/	28.7	
KWDK12-1	0.75	419.6	103	136	211.1	96	245	140	182	100	210	1 1/2	223.5	246.5	14.7	
KWDK12-2	1.3	419.6	103	136	211.1	96	245	140	182	100	210	1 1/2	223.5	246.5	16.5	
KWDK12-3	2.2	450.1/475.1	103	136	216.6	96	275.5/300.5	140	182	100	210	1 1/2	230.5	253.5	20/23.8	
KWDK12-4	2.7	505.1	133	136	246.6	96	300.5	140	182	100	210	1 1/2	230.5	/	24.5	
KWDK12-5	3	560.1	163	162	276.6	122	325.5	140	182	100	210	1 1/2	230.5	/	28.7	
KWDK15-1	1.3	419.6	103	136	211.1	96	245	140	182	100	211	2	223.5	246.5	18.2	
KWDK15-2	2.2	450.1/475.1	103	136	216.6	96	275.5/300.5	140	182	100	211	2	230.5	253.5	21.8/25.6	
KWDK15-3	3.5	507.6	103	170	224.6	140	333	160	200	105	216	2	262	/	32.4	
KWDK15-4	5.5	595.6	133	180	253.6	140	391	180	230	120	231	2	290	/	45.3	
KWDK15-5	7.5	625.6	163	180	283.6	140	391	180	230	120	231	2	290	/	51.8	
KWDK16-1	1	404.6	87.5	136	196.1	96	245	140	182	100	211	2	223.5	246.5	16	
KWDK16-2	1.6	435.1	87.5	136	201.6	96	275.5	140	182	100	211	2	230.5	253.5	18.5/20.5	
KWDK16-3	2.7	505.1	133	136	246.6	96	300.5	140	182	100	211	2	230.5	/	25.5	
KWDK16-4	3.5	582.6	178	170	299.6	140	333	160	200	105	216	2	262	/	33.2	
KWDK16-5	4	627.6	223	170	344.6	140	333	160	200	105	216	2	262	/	37.8	