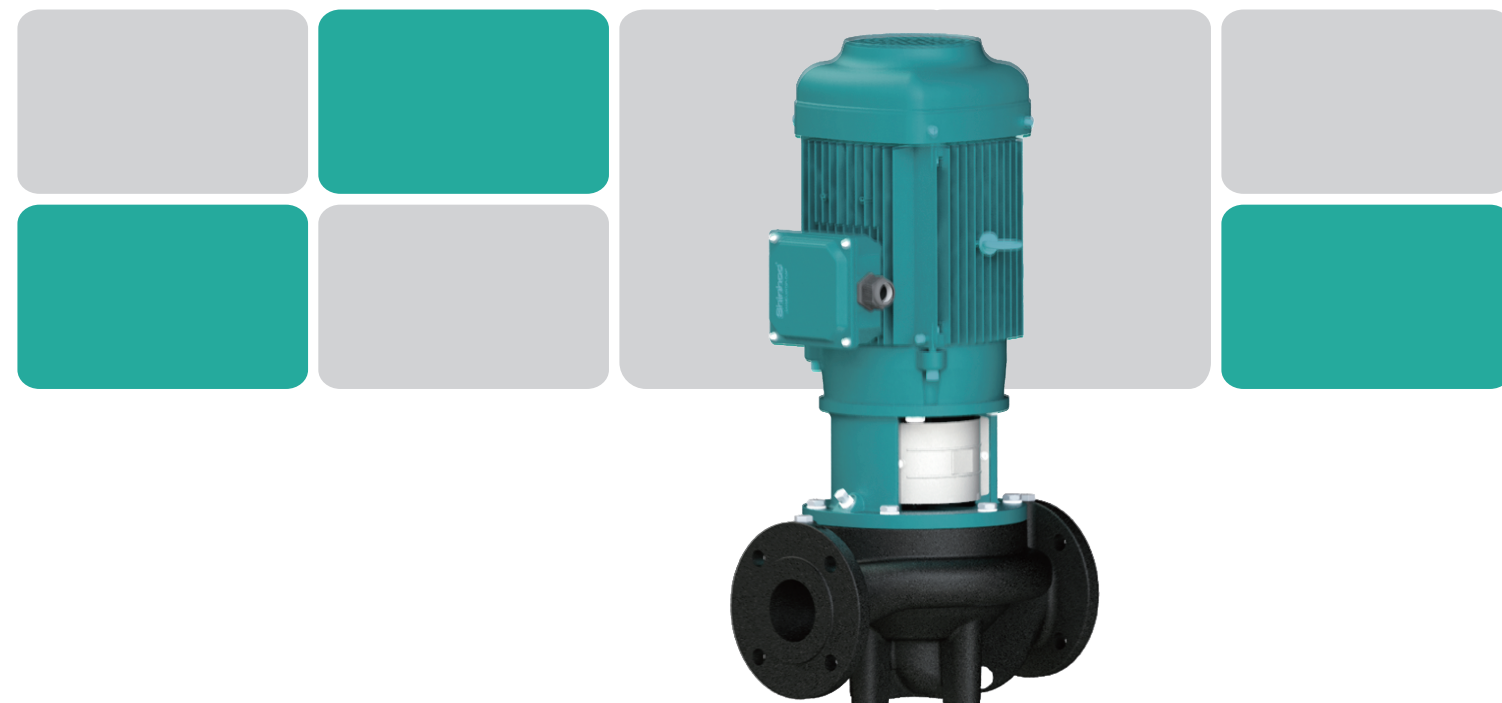


Shinhoo



Vertical Inline Pump

PRODUCT CATALOGUE

Anhui Shinhoo Canned Motor Pump Co., Ltd.

Address: No.780, Ming Chuan Road, High-Tech Zone,
Hefei, Anhui, P.R China
Tel: +86-551-62379807
E-mail: info@shinhoodump.com
<https://www.shinhoo.com>

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Company profile

Anhui Shinhoo Canned Motor Pump Co., Ltd., established on May 28, 2018, is a wholly-owned subsidiary of Zhejiang Dayuan Pump Industry Co., Ltd. (Shanghai Stock Exchange: 603757). Upholding the Group’s strategic vision of "Wholeheartedly dedicated to pump excellence, we build a century enterprise," the company specializes in the R&D, manufacturing, and sales of commercial and residential canned motor pumps. Its products are widely applied across multiple fields including HVAC, building water supply, hot water systems, and equipment room cooling, providing leak-free fluid transfer system solutions to diverse industrial clients. With a service network spanning nearly 100 countries and regions worldwide, Anhui Shinhoo serves as a core supplier to numerous Fortune Global 500 enterprises such as Gree, Midea, Haier, Bosch, Vaillant and Samsung.

As a member unit of the National Pump Standardization Technical Committee, Anhui Shinhoo has participated in drafting a series of industry standards for canned motor pumps and canned motors. The company boasts:

A 100+ member R&D team

CNAS-accredited laboratory with TÜV collaboration

Comprehensive R&D and testing capabilities

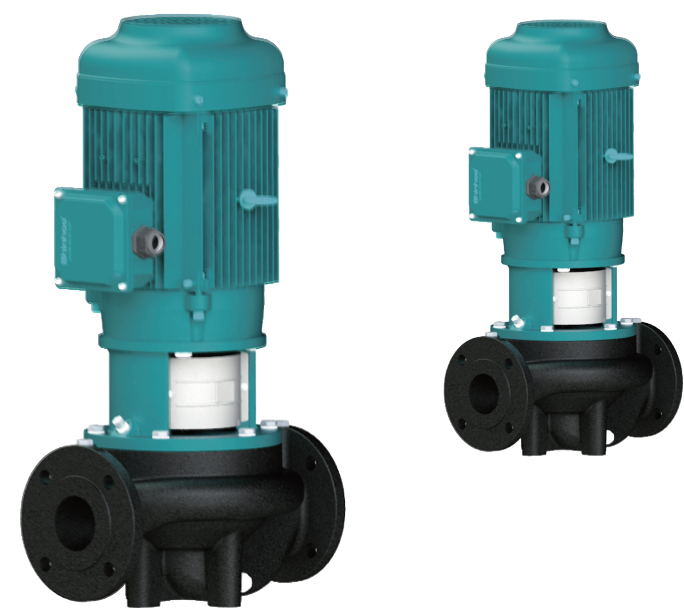
Product certifications including CCC, GS, TÜV, UL, CE

Compliance with RoHS, REACH, EEL regulations

Committed to customer-driven product innovation and quality enhancement, the company is dedicated to leading the development and advancement of China’s canned motor pump industry.

From product design to manufacturing, Anhui Shinhoo implements low-carbon standards throughout its entire workflow. The company has pioneered the introduction of advanced international production equipment clusters, established strategic supplier alliances, and built a full lifecycle quality management system—forging China’s precision manufacturing quality benchmark within the global supply chain.





► Product overview

- 1. The series of products are vertical single-stage pipeline centrifugal pumps.
- 2. Standard configuration: Mechanical Seal, Standard Motor.
- 3. The top pull-out design is convenient for daily maintainance, the pump head (motor base box impeller) can beremoved for maintenance, overhaul, without the removal of the pump body and the two-sided pipeline.
- 4. Impeller hydraulic design is optimized by CFD fluid simulation and analysis technology, and the hydraulic efficiency is higher.
- 5. Impeller with double-port ring balance structure, the axial force is smaller, bearing life is longer.

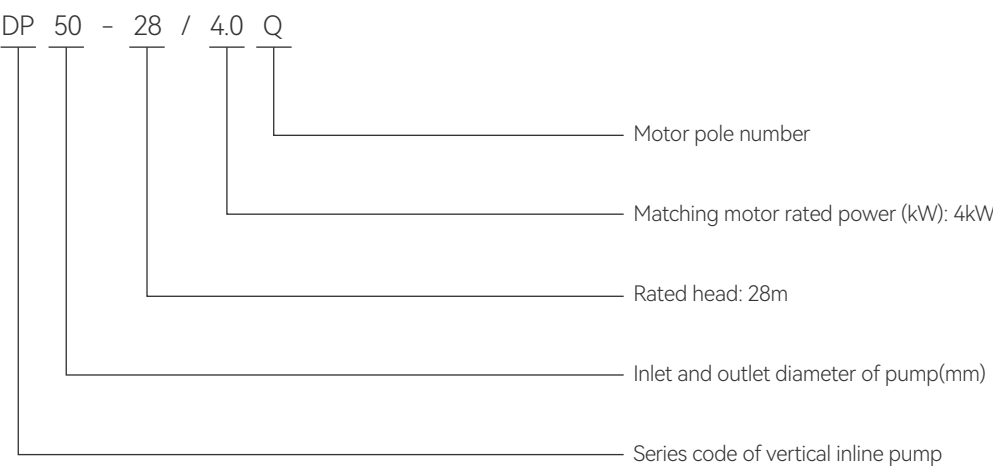
► Motor

- 1. Fully enclosed air-cooled standard motor
- 2. Insulation: F grade
- 3. Protection level: IP 55

► Application environment

DP series vertical pipeline pumps are suitable for conveying liquids with low viscosity, non-inflammableand explosive vaporization, without solid particles (particle size <0.2 mm) and fiber. They are widely usecin heating system, boiler feed water, pipeline pressurization, refrigeration and cooling water circulationdomestic hot water system, industrial liquid and softened water environment.

► Model description



► Working conditions

No.	Name	Material
1	Caliber range	DN50-DN100
2	Flow range	<100m³/h
3	Head range	<40m
4	Power range	4~11KW
5	Power requirements	380V/50Hz(Three phase)
6	Ambient temperature	-25°C~50°C
7	Mediumtemperature	-25°C~104°C
8	Max. elevation	1000m
9	Max. working pressure	10bar(Standard configuration)

► Performance parameter

Name	Material			
Caliber	DN50	DN65	DN80	DN100
Electrical link	Electrical link			
Power(KW)	4	4~11	4~11	11
Applications	Applications			
Delivery medium	Clear water or a mixture of water and ethylene glycol (≤55%)			
Temperature (°C)	-25°C~104°C			
Performance parameter	Performance parameter			
Max.pressure(bar)	10			
Flow range	5~35	10~70	10~100	1~130
Inlet dimension(mm)	50	6	80	100
Exit dimension (mm)	50	565	80	100
Insulation	F			
Protection level	IP55			
Weight (KG)	67	71~183	7~184	184
Pump body materia	Cast iron			
Impellers	Cast iron			
Axles	Stainless steel			
Mechanical seal	Graphite, silicon carbide, high/low temperature resistant rubber			

Standard fitting: PN10bar; Matching PN 16 bar; GB/T9119-2000 Full series flange corresponding size corresponding.

PN10bar(10kg)/16bar(16kg)				
Nominal diameter	Outside diameter of Flange	Bolt hole spacing	Number of bolt holes	Bolt specification
DN50	165	125	4	M16
DN65	185	145	4	M16
DN80	200	160	8	M16
DN100	220	180	8	M16

► Pipeline loss estimate form

Pipe diameter (mm)	Flow(l/s)										
	0.5	1	2	4	6	8	10	15	20	25	30
50		0.81	3.24	12.9	29.1						
65			0.81	3.24	7.29	13.0	20.2				
100				0.34	0.77	1.36	2.13	4.78	8.50	13.3	19.1
Pipe diameter (mm)	Flow(m³/h)										
	1.8	3.6	7.2	14.4	21.6	28.8	36	54	72	90	108

Note: Friction loss table of straight pipe (for estimation): the loss meter of 100m straight pipe is based onthe new castiron pipe, double the old pipe.

Unit conversion:

1Pa=1N/m³=10⁻⁶MPa
0.1MPa=10m Water column=100KPa=1Kilograms=1atm
p=pgh
p Water=1000kg/m³
d: ϕ200mm=0.2m
V: 1.73m/s
Q: 195.66m³/h
Q= 900πd2V(m³/h)

Length of straight pipe for valve and bend (single)		
Species	Multiple of reduced pipe diameter	Notes
Full opening gate valve	12	Not open double
Standard bend	25	
Check valve	100	
Low valve	100	Partial blockage. double

Note: For example, 100mm diameter pipe, 100 times the foot valve, diameter = 100x100 = 10000mm =10m straight pipe length.
Assuming the flow rate is 8 l/s, check the table above, the loss of 1.3 m per 100 mstraight pipe, that is, a 100 mm bottom valve at the flow rate of8 l/s, the loss of head 0.13 m.

Max. flow limit for a given pipe diameter			
Pipe diameter	Max. flow		Max. velocity
(mm)	(l/s)	(m³/h)	(m/s)
50	4.11	14.8	2.1
65	7.3	26.3	2.2
100	18.9	67.9	2.4

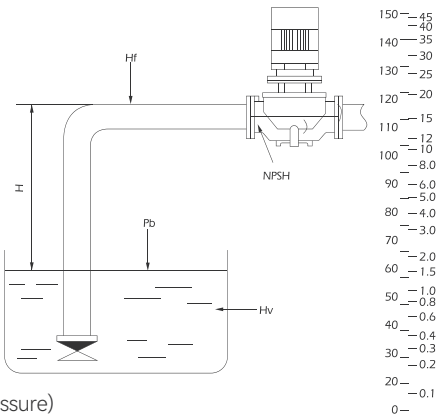
Note: The maximum flow loss in excess of this line is significantly decreased.

► Min. inlet pressure

It is suggested to calculate the inlet pressure when the following conditions exist.

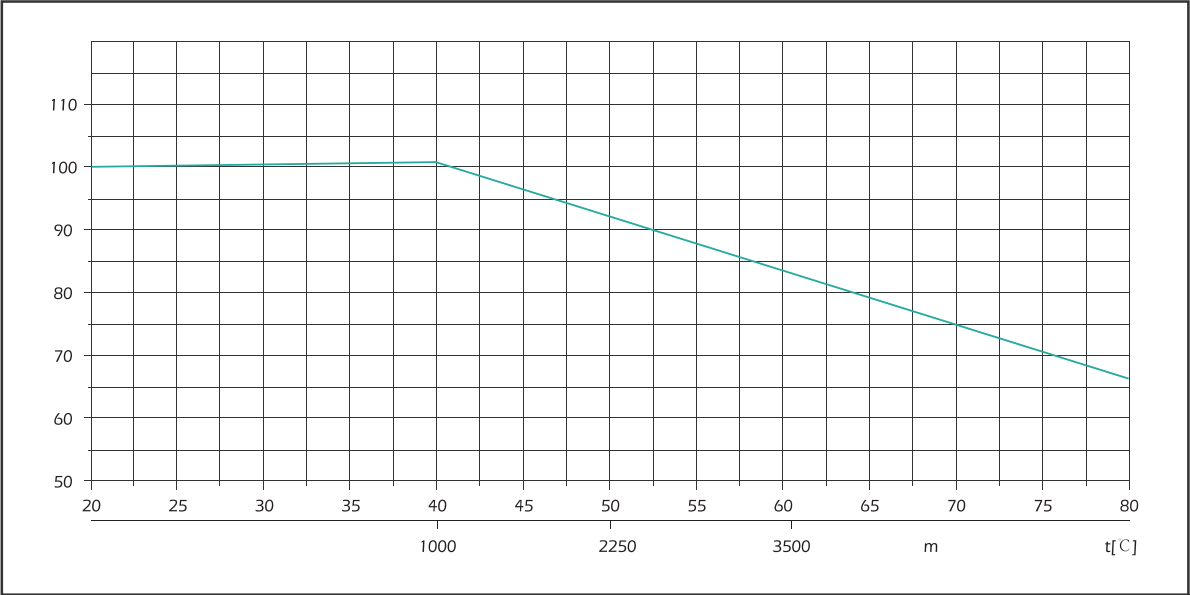
1. Highliquid temperature
2. Flow rate is obviously greater than the rated flow rate
3. Draw waterfromlow places
4. Draw water from along pipe line
5. Poor inlet conditions. It is necessary to ensure a minimum pressure at the inlet side of the pump to avoidcavitation

Max. Suction Height "H" can be calculated as follows: H=Pbx10.2-SH-NPHF-HV-HS
Pb: Atmospheric pressure, unit: Bar (can be set to 1bar, in closed systems, PB for system pressure)
NPSH: net positive suction head of pump, unit: m
Hf: Suction line resistance loss, unit: m (under maximum pump flow)
Hv: vaporization pressure, unit: m (readable from vaporization pressuregauge, value depends on liquidtemperature "tm")
Hs: minimum safe margin 0.5 m



► Ambient temperature effect

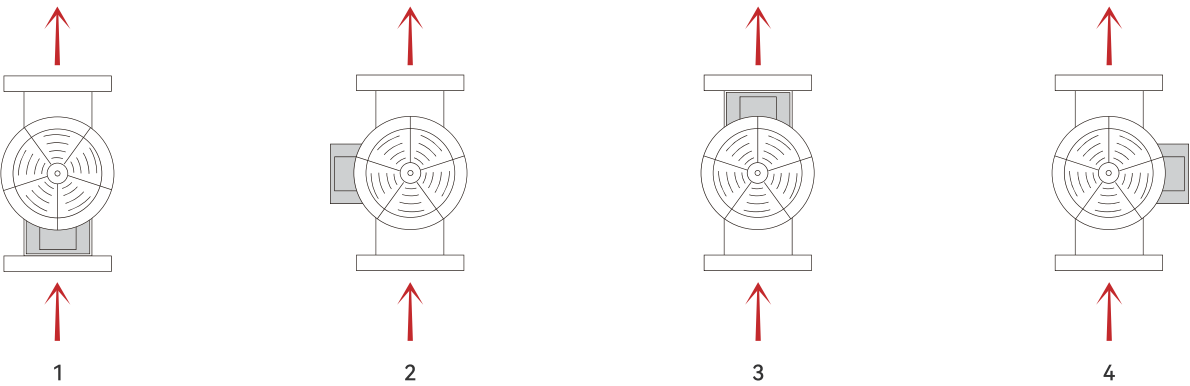
The maximum ambient temperature of the motor is 40°C. When the motor exceeds 40°C or is installed at an altitude of 1000 meters, the cooling effect of the motor is not good due to the low air density, and the rated output power of the motor (P2) will be reduced, as shown in the figure. Therefore, a motor with higher output power is needed.



Note: When the pump is installed above 3,500 m above sea level, P2 will decrease to 88%, and when the ambient temperature reaches 70 °C, P2 will decrease to 78%.

► Junction box location

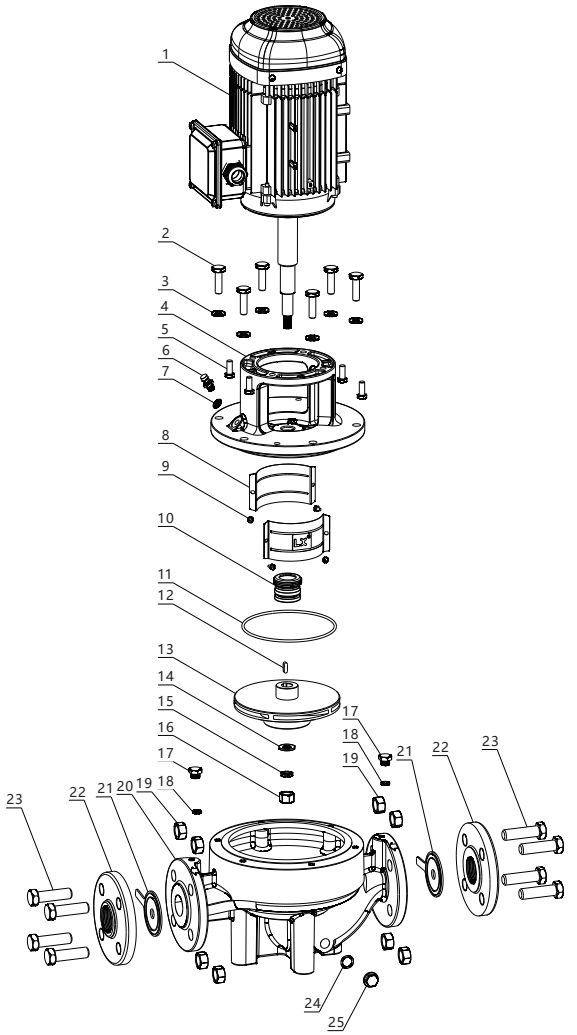
Note: Ex-factory Standard by location 3.



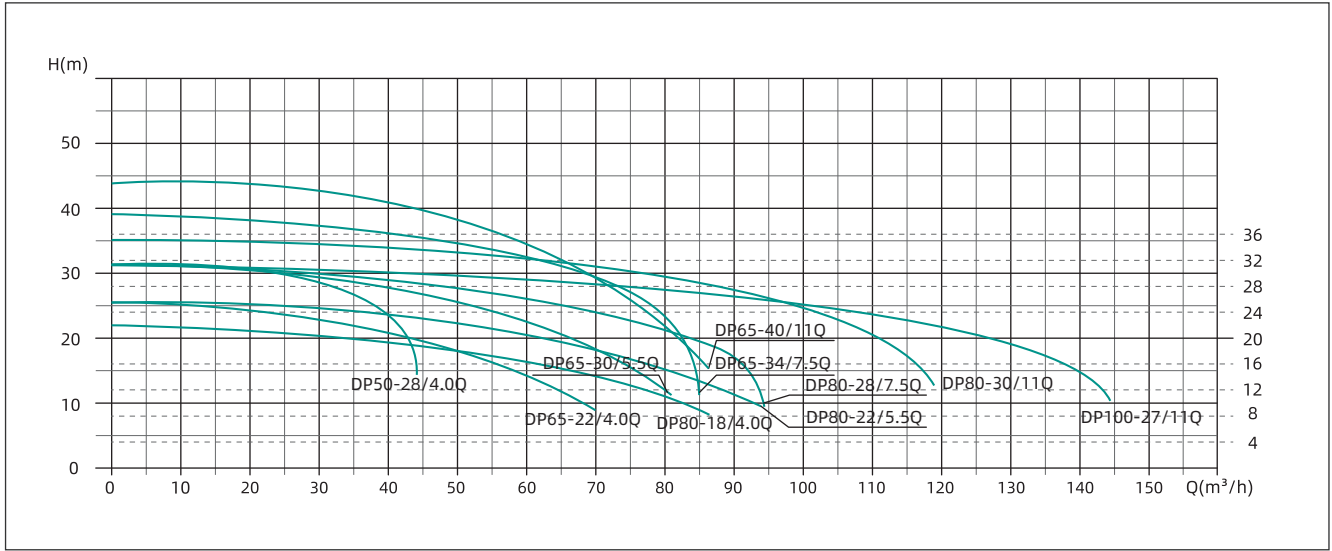
► Structural drawing

Material List

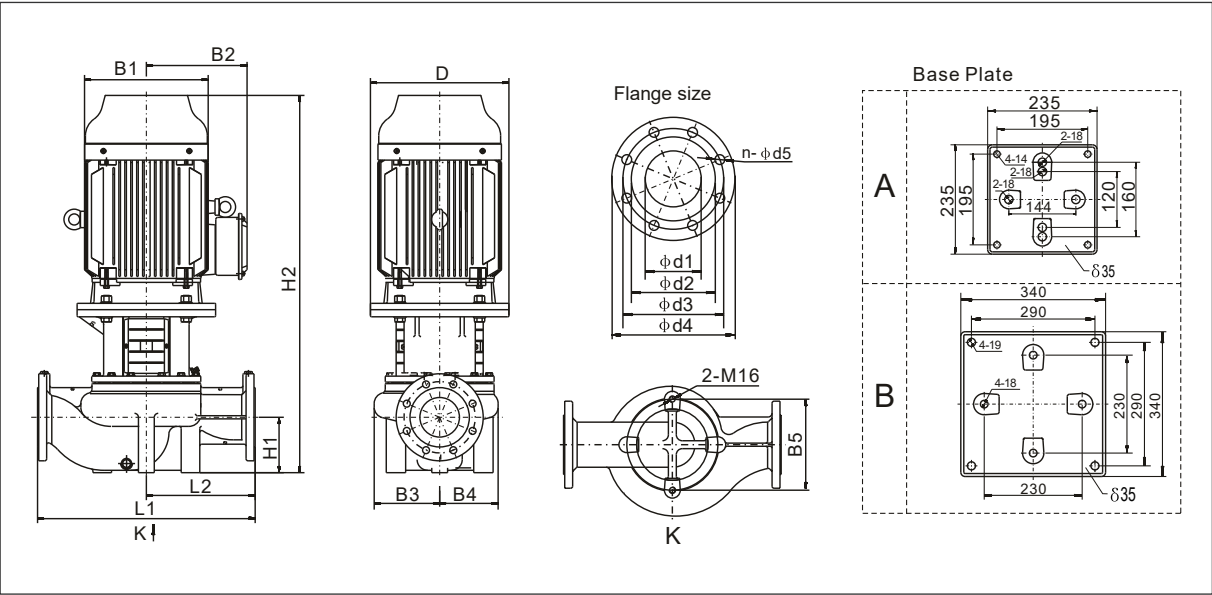
No.	Part Name	Materials
1	Motor	
2	Hex bolt	A3
3	Flat wahser	A3
4	Pump cover	HT200
5	Hex bolt	A3
6	Exhaust bolt	SUS304
7	Washer	Nylon
8	Pretection cover	SUS304
9	Cross screw	SUS304
10	Mechanical seal	Carbon/ Silcion carbide/ Viton
11	O-ring	EPDM
12	Flat key	45#
13	Impeller	HT200
14	Flat washer	SUS304
15	Spring washer	SUS304
16	Hex nut	SUS304
17	Plug	SUS304
18	O-ring	EPDM
19	Hex nut	A3
20	Pump body	HT200
21	Flange washer	EPDM
22	Flange	HT200
23	Hex bolt	A3
24	O-ring	EPDM
25	Plug	SUS304



► Type spectrogram



► Installation drawing

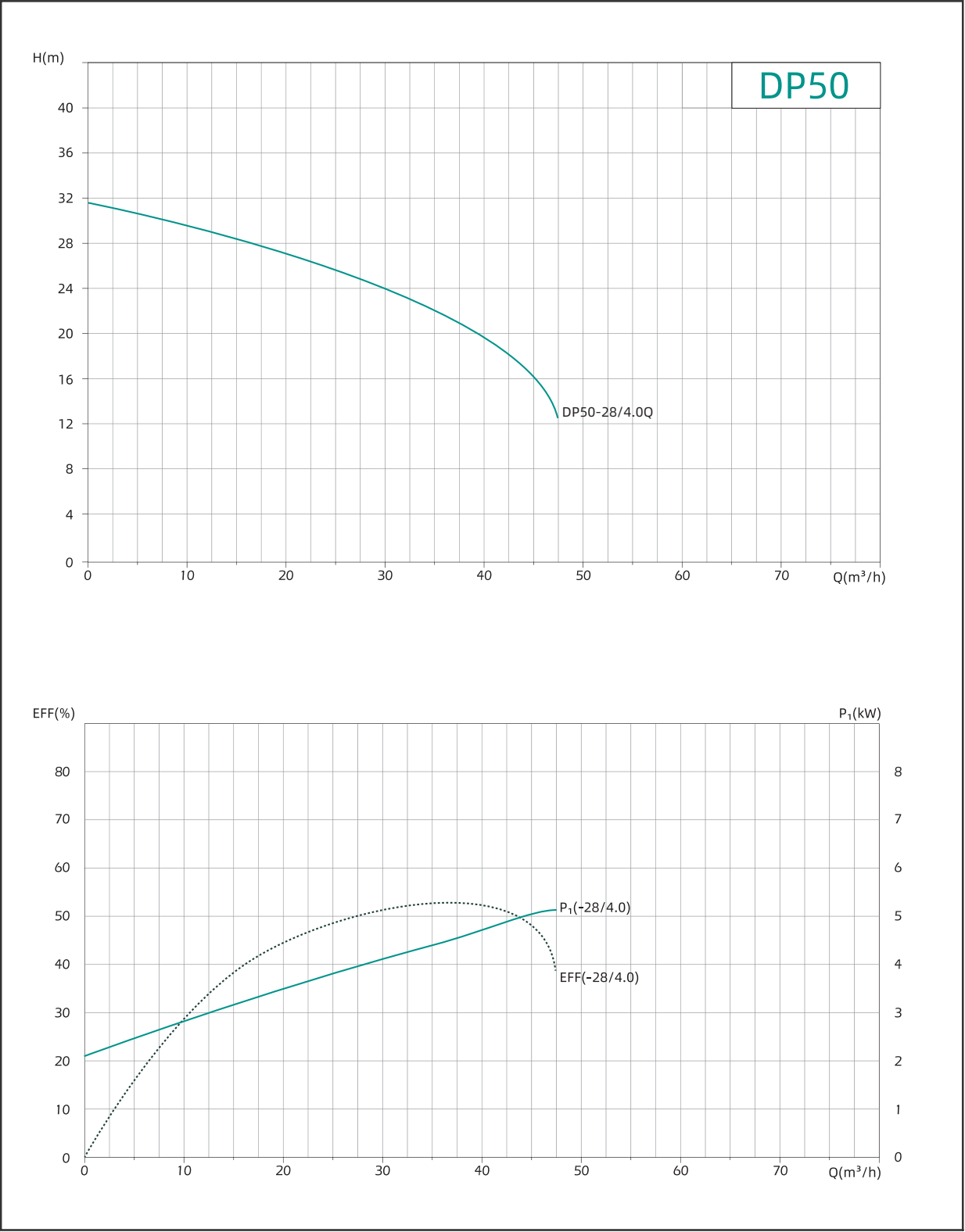


► Technical data

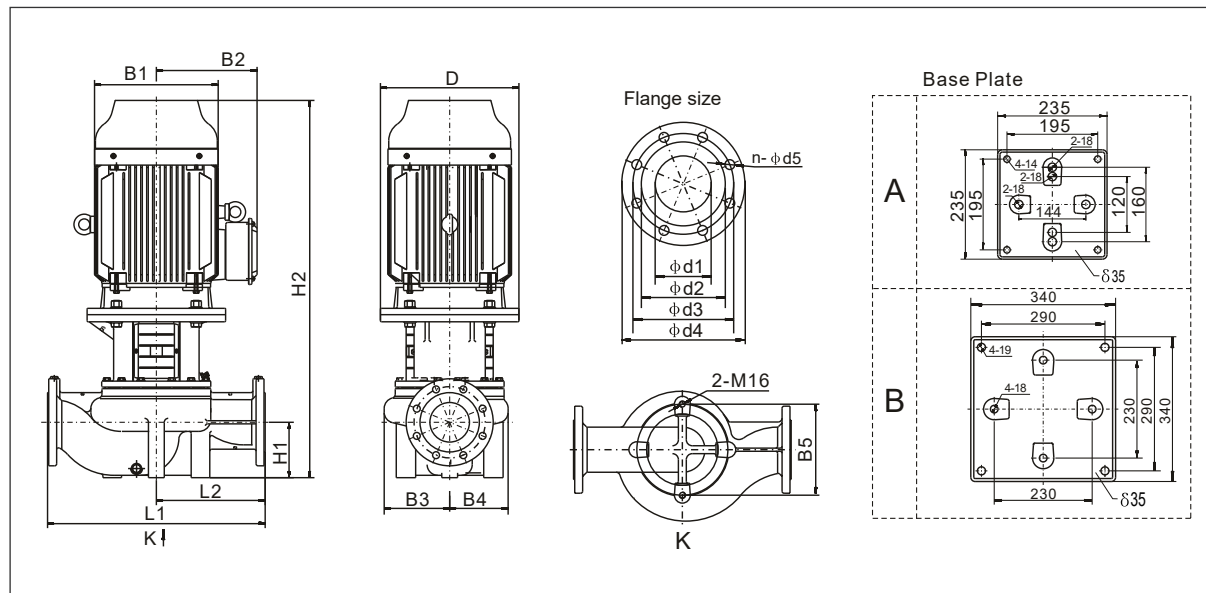
Model	Power P ₂ (kW)	Voltage /Frequency P ₂ (kW)	Rated flow Q _n (m ³ /h)	Rated head H _n (m)	Inlet and outlet diameters (mm)	Motor energy efficiency grade	Rated current (A)	Rotational speed (rpm)
DP50-28/4.0Q	4	380/50	30	28	DN50	IE2/IE3	7.8	2900

Model	Dimension(mm)										Flange size (mm)					Base Plate
	D	B1	B2	B3	B4	B5	H1	H2	L1	L2	$\phi d1$	$\phi d2$	$\phi d3$	$\phi d4$	$n-\phi d5$	
DP50-28/4.0Q	220	210	170	129	115	144	115	636	340	170	$\phi 50$	$\phi 90$	$\phi 125$	$\phi 165$	4- $\phi 18$	A

► Performance curves



► Installation drawing

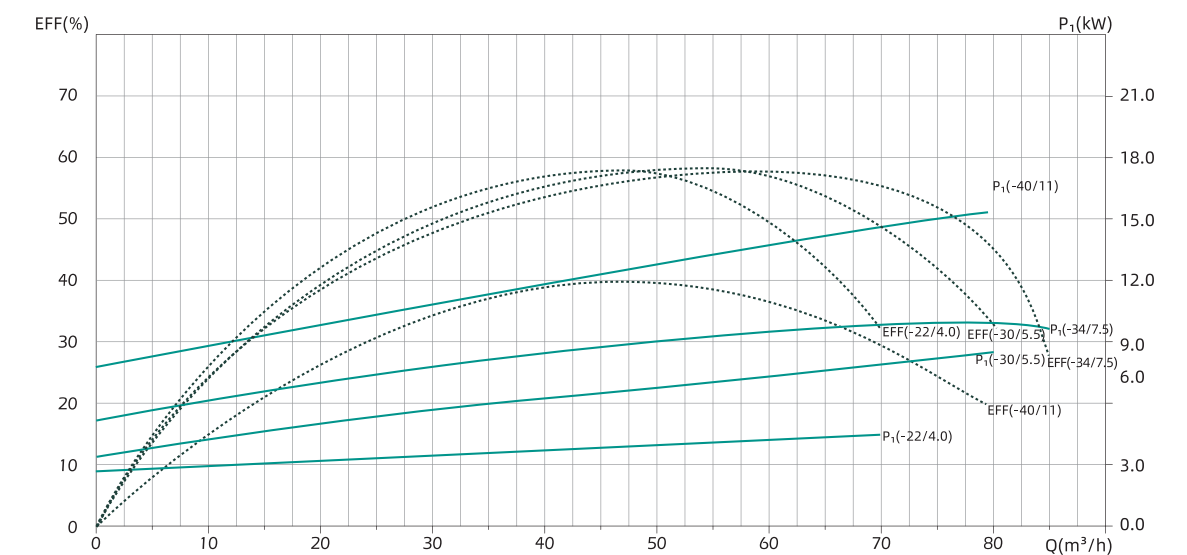
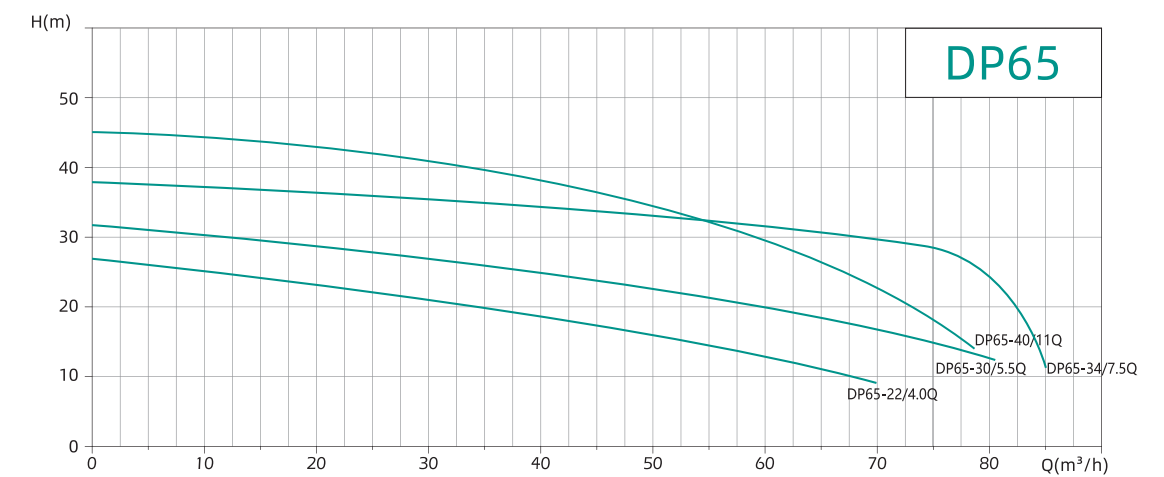


► Technical data

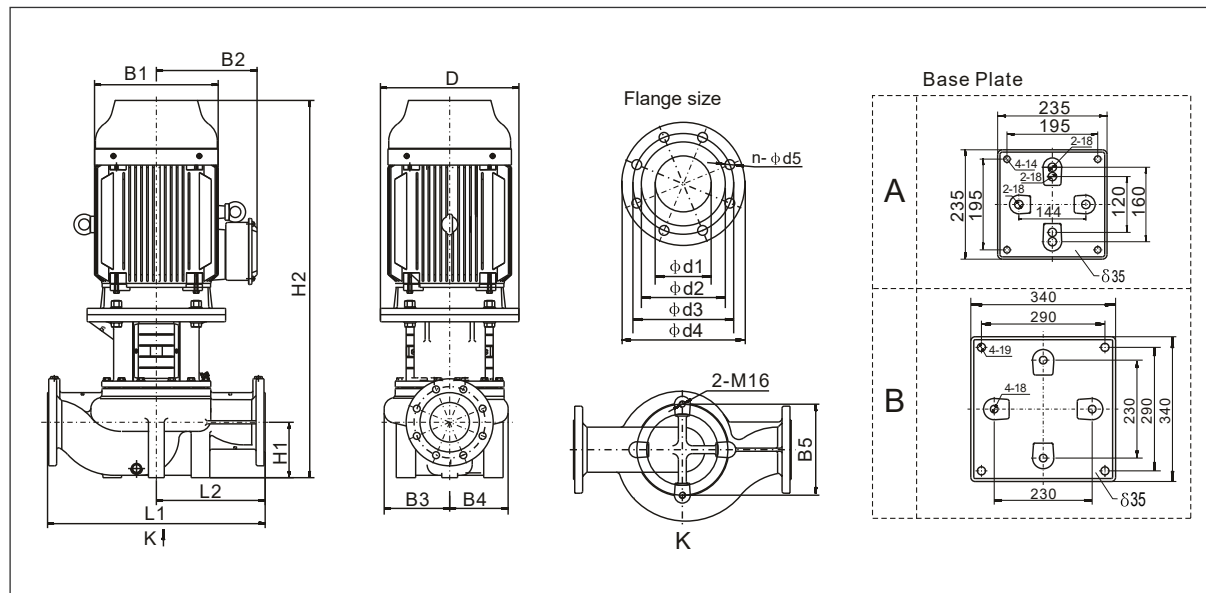
Model	Power P2(kW)	Voltage /Frequency P2(kW)	Rated flow Qn(m3/h)	Rated head Hn(m)	Inlet and outlet diameters (mm)	Motor energy efficiency grade	Rated current (A)	Rotational speed (rpm)
DP65-22/4.0Q	4	380/50	40	22	DN65	IE2/IE3	7.8	2900
DP65-30/5.5Q	5.5	380/50	40	30	DN65	IE2/IE3	10.6	2900
DP65-34/7.5Q	7.5	380/50	50	34	DN65	IE2/IE3	14.4	2900
DP65-40/11Q	11	380/50	50	40	DN65	IE2/IE3	20.6	2900

Model	Dimension(mm)										Flange size (mm)					Base Plate
	D	B1	B2	B3	B4	B5	H1	H2	L1	L2	φd1	φd2	φd3	φd4	n-φd5	
DP65-22/4.0Q	220	210	170	146	122	144	105	642	360	180	φ 65	φ 110	φ 145	φ185	4-φ 18	A
DP65-30/5.5Q	260	255	188	146	122	144	105	748	360	180	φ 65	φ 110	φ 145	φ185	4-φ 18	A
DP65-34/7.5Q	260	255	188	146	122	144	105	748	360	180	φ 65	φ 110	φ 145	φ185	4-φ 18	A
DP65-40/11Q	350	313	255	179	163	144	125	888	475	238	φ 65	φ 110	φ 145	φ185	4-φ 18	A

► Performance curves



► Installation drawing

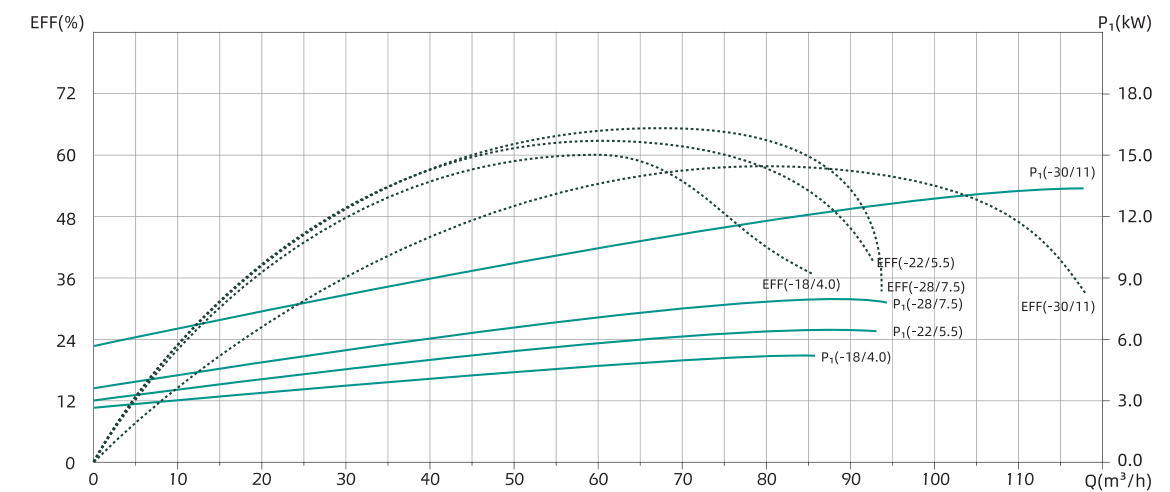
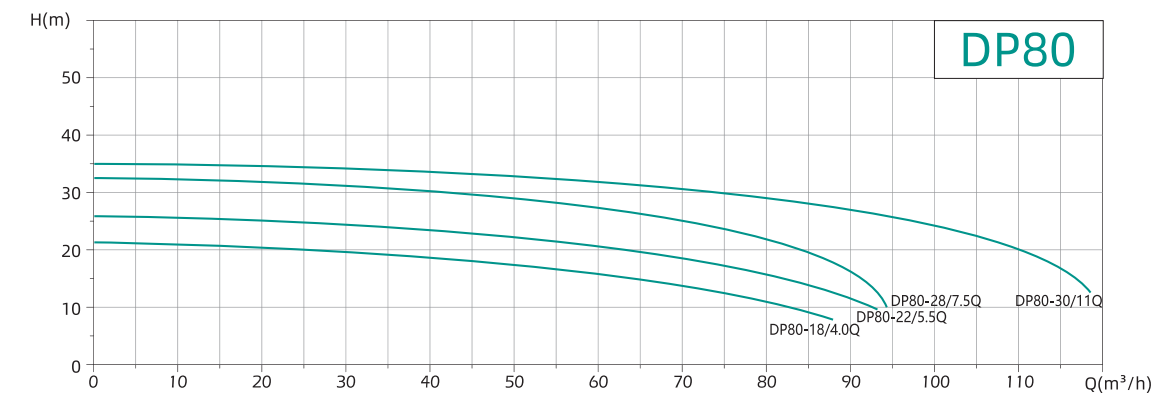


► Technical data

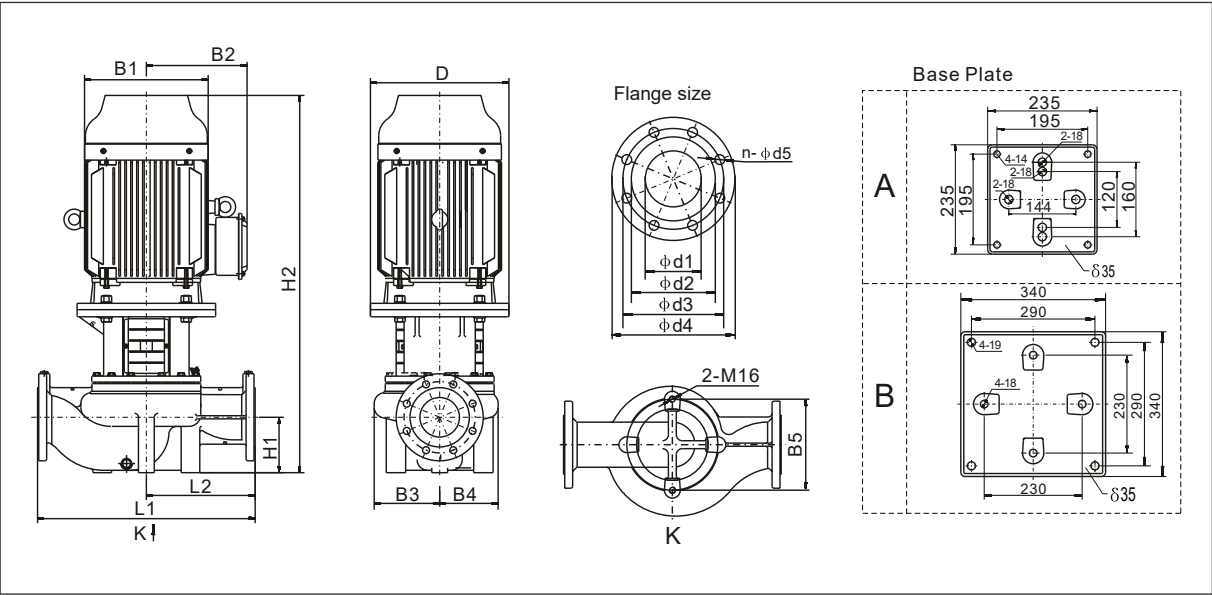
Model	Power P2(kW)	Voltage /Frequency P2(kW)	Rated flow Qn(m3/h)	Rated head Hn(m)	Inlet and outlet diameters (mm)	Motor energy efficiency grade	Rated current (A)	Rotational speed (rpm)
DP80-18/4.0Q	4	380/50	50	18	DN80	IE2/IE3	7.8	2900
DP80-22/5.5Q	5.5	380/50	50	22	DN80	IE2/IE3	10.6	2900
DP80-28/7.5Q	7.5	380/50	50	28	DN80	IE2/IE3	14.4	2900
DP80-30/11Q	11	380/50	80	30	DN80	IE2/IE3	20.6	2900

Model	Dimension(mm)										Flange size(mm)					Base Plate
	D	B1	B2	B3	B4	B5	H1	H2	L1	L2	φd1	φd2	φd3	φd4	n-φd5	
DP80-18/4.0Q	220	210	170	140	117	160	97	664	450	225	φ80	φ130	φ160	φ200	8-φ18	A
DP80-22/5.5Q	260	255	188	140	117	160	97	770	450	225	φ80	φ130	φ160	φ200	8-φ18	A
DP80-28/7.5Q	260	255	188	140	117	160	97	770	450	225	φ80	φ130	φ160	φ200	8-φ18	A
DP80-30/11Q	350	313	255	184	163	144	115	897	500	250	φ80	φ130	φ160	φ200	4-φ18	A

► Performance curves



► Installation drawing



► Technical data

Model	Power P2(kW)	Voltage /Frequency P2(kW)	Rated flow Qn(m3/h)	Rated head Hn(m)	Inlet and outlet diameters (mm)	Motor energy efficiency grade	Rated current (A)	Rotational speed (rpm)
DP100-27/11Q	11	380/50	100	27	DN100	IE2/IE3	20.6	2900

Model	Dimension(mm)										Flange size(mm)					Base Plate
	D	B1	B2	B3	B4	B5	H1	H2	L1	L2	φd1	φd2	φd3	φd4	n-φd5	
DP100-27/11Q	350	313	255	151	121	144	140	909	550	275	φ100	φ150	φ180	φ220	8-φ18	A

► Performance curves

