



## A - Series



Vertical Multistage Centrifugal  
in-line Pumps

**AVC/AVI/AVS**



**50 Hz**



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# A-Series

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### Type Key

## AVC- 3M02

A-series

Pump Type

V : Vertical

Pump material

C : Cast iron  
(Discharge & Suction)  
I : Stainless steel 304  
S : Stainless steel 316

Number of Stages  
(Impeller)

02: 2 stages  
03: 3 stages  
04: 4 stages  
05: 5 stages  
06: 6 stages  
...etc

Delivery (m<sup>3</sup>/h)

1M : 1 m<sup>3</sup>/h  
3M : 3 m<sup>3</sup>/h  
5M : 5 m<sup>3</sup>/h  
10M : 10 m<sup>3</sup>/h  
15M : 15 m<sup>3</sup>/h  
20M : 20 m<sup>3</sup>/h  
32M : 32 m<sup>3</sup>/h  
45M : 45 m<sup>3</sup>/h  
64M : 64 m<sup>3</sup>/h  
90M : 90 m<sup>3</sup>/h  
120M : 120 m<sup>3</sup>/h  
150M : 150 m<sup>3</sup>/h

# Pumps & Pumps

## A-Series 50HZ Vertical Multistage Centrifugal in-line Pumps AVC / AVI / AVS



AVC

AVI

AVS

### Feature

in-line design /High Efficiency  
Reliability/Easy Maintenance/  
Wide Range

### Application

Irrigation and agriculture  
Water supply / Light industry  
Pressure boosting / Water treatment  
Heating, ventilation / air-conditioning

### Mechanical Seals

Standard Cartridge type mechanical seal made of Silicon Carbide/ Silicon Carbide/EPDM or Viton. Based on the type of application, alternative materials are available for the seal and the elastomers. The cartridge type mechanical seal can be replaced in minutes without special tools and without dismantling the pump.



### Type of Seal

Seal Type	AVC	AVI	AVS
Mechanical Seals			
S:Cartridge seal	•	•	•
OO	•	•	•
UU	Optional	Optional	Optional
QB	Optional	Optional	Optional
UB	Optional	Optional	Optional
Seals			
E	•	•	•
V	Optional	Optional	Optional

### List of Materials

Q:	Silicon carbide	E:	EPDM
U:	Tungsten carbide	V:	Viton
B:	Carbon		

The AVC, AVI and AVS pumps are non-self priming vertical multistage pump of in-line design, flange or with Victaulic coupling with equally sized suction and discharge ports. Stage construction with stainless steel impellers, chambers and pressure casing. Pump stub shaft and motor shaft of the IEC-standards motor are directly close coupled. All pumps are equipped with a cartridge type mechanical seal for easy maintenance.

### Product Data

Range	AVC / AVI / AVS											
	1	3	5	10	15	20	32	45	64	90	120	150
50Hz												
Nominal flow (m³/h)	1	3	5	10	15	20	32	45	64	90	120	150
Flow range (m³/h)	0.7-2.4	1.2-4.5	2.5-8.5	5-13	8.5-23.5	10.5-29	15-40	22-58	30-85	45-120	60-160	75-180
Max. pressure (bar)	21.5	23	24	21.5	23	24.3	27.5	33	21.8	20	20.4	18.7
Fluid temperature (°C)	-15~+120											
Motor power (kw)	0.37-2.2	0.37-3	0.37-5.5	0.37-7.5	1.1-15	1.1-18.5	1.5-30	3-45	4-45	5.5-45	11-75	11-75
Motor												
Mains connection 1 phase ( V/Hz )	220-240 V 50Hz											
Mains connection 3 phase ( V/Hz )	0.37-7.5 kw 220-240/380-415 V 50Hz From 11kw 380-415 V 50 Hz											
Insulation class	F											
Enclosure class	IP 55											
Ambient temperature	Max. +50 °C											
AVC Pipe Connection												
Flange	DN 25/ DN 32	DN 25/ DN 32	DN 25/ DN 32	DN 40	DN 50	DN 50	DN 65	DN 80	DN 100	DN 100	DN 125	DN 125
AVI/S Pipe Connection												
Flange	DN 25/ DN32	DN 25/ DN32	DN 25/ DN32	DN 40	DN 50	DN 50	DN 65	DN 80	DN 100	DN 100	DN 125	DN 125
Victaulic-connections	R 1 1/4	R 1 1/4	R 1 1/4	R 2	R 2	R 2	N/A	N/A	N/A	N/A	N/A	N/A
Mechanical Seals	SIC/SIC											
Seals	EPDM:Standard						EPDM:0.37kW-45kW					
	Viton:Optional						Viton:55kW-75kW					

>Flange standards : Refer to dimensional drawings

All technical information is subject to change without notice.

### Maximum operating and inlet pressures

AVC/AVI/AVS 50 Hz				
	Stages	Maximum Operating Pressures	Stages	Maximum Inlet Pressures
<b>1M</b>	02-36	25bar	02-36	10bar
<b>3M</b>	02-36	25bar	02-29	10bar
			31-36	15bar
<b>5M</b>	02-36	25bar	02-16	10bar
			18-36	15bar
<b>10M</b>	01-16	16bar	01-6	8bar
	17-22	25bar	07-22	10bar
<b>15M</b>	01-10	16bar	01-3	8bar
	12-17	25bar	04-17	10bar
<b>20M</b>	01-10	16bar	01-3	8bar
	12-17	25bar	04-17	10bar
<b>32M</b>	(01-1)-7	16bar	(01-1)-4	4bar
	(08-2)-14	30bar	(05-2)-10	10bar
			(11-2)-14	15bar
<b>45M</b>	(01-1)-5	16bar	(01-1)-2	4bar
	(06-2)-11	30bar	(03-2)-5	10bar
	(12-2)-(13-2)	33bar	(06-2)-(13-2)	15bar
<b>64M</b>	(01-1)-5	16bar	(01-1)-(02-2)	4bar
	(06-2)-(08-1)	30bar	(02-1)-(04-2)	10bar
			(04-1)-(08-1)	15bar
<b>90M</b>	(01-1)-4	16bar	(01-1)-1	4bar
	(05-2)-6	30bar	(02-1)-(03-2)	10bar
			03-6	15bar
<b>120M</b>	01-7	30bar	01-(02-1)	10bar
			02-(05-1)	15bar
			(06-1)-7	20bar
<b>150M</b>	(01-1)-6	30bar	(01-1)-1	10bar
			(02-1)-(04-2)	15bar
			(05-2)-6	20bar

Rule to follow: The inlet pressure + the pressure against a closed valve < Max. Operating pressure.

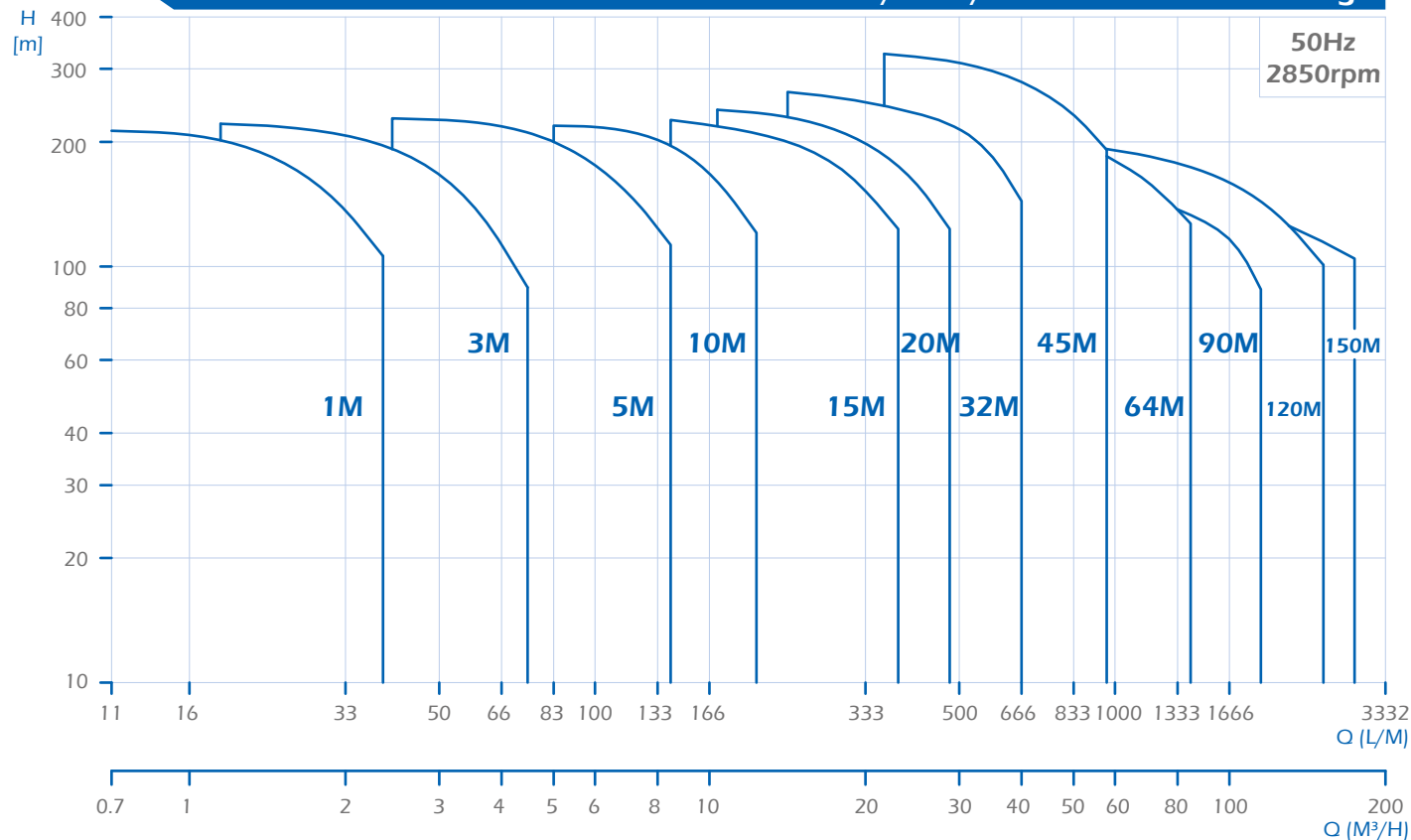
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Motor Data

- Squirrel cage in short circuit, aluminum casing up to 22 kw, totally enclosed, fan-cooled, 2-pole standard motor.
- Standard supply Evak motors up to 1.1 kw. Other motor brands for higher powers.
- Electrical data
  - Enclosure class: IP 55
  - Insulation class: F
  - Standard voltages: P2: 0.37-7.5 kw 3x220-240/380-415 V
  - P2: From 11kw 3x380-415 V
- The motors have efficiency values that fall within the range normally referred to as high efficiency.
- Ambient temperature: Max. +50°C

Motor Type				Nominal Current in [A]						
HP	KW	Pole	Flange	Frame	3PH-220V	3PH-240V	3PH-380V	3PH-415V	3PH-660V	3PH-690V
0.5	0.37	2	B14	71A	1.8	1.9	1	1.1		
0.75	0.55	2	B14	71B	2.6	2.7	1.5	1.6		
1.0	0.75	2	B14	80A	3.4	3.6	2	2.1		
1.5	1.1	2	B14	80B	5.1	5.2	2.9	3		
2.0	1.5	2	B14	90S	6	6.2	3.5	3.6		
3.0	2.2	2	B14	90L	9.5	10	5	5.8		
4.0	3.0	2	B14	100L	12.1	12.5	7	7.2		
5.5	4.0	2	B14	112M	14.9	15	8.6	8.7		
7.5	5.5	2	B5	132S			12.1	12	7	6.9
10	7.5	2	B5	132S			16	15.3	9.2	8.8
15	11	2	B5	160M			21	19.2		
20	15	2	B5	160M			28.4	26		
25	18.5	2	B5	160L			34.7	31.8		
30	22	2	B5	180M			41.1	37.7		
40	30	2	B5	200L			55.7	51		
50	37	2	B5	200L			68.3	62.5		
60	45	2	B5	225M			87.2	78.6		
75	55	2	B5	250M			101	92.5		
100	75	2	B5	280S			134	123		

AVC / AVI / AVS Performance Range



All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Pumped Liquids

AVC/I/S pumps can handle a wide variety of liquids, each with its own characteristic.

#### AVC/I

Non-corrosive liquids

For fluid transfer, circulation and pressure boosting of cold or hot clean water.

#### AVS

Industrial liquids

Light acids

The fluids covered in the list are not complete. Data on the application limits of different pump materials when handling any of the listed fluids are considered to be the best choices. However, the table is intended as a general guide only, and cannot replace actual testing of the pumped fluids and pump materials under specific working conditions.

When choosing the pump version, sufficient attention should be given to the flow medium, such as density, solidification point, viscosity as well as ex-protection requirement. The limits of applicability of the pumps, based on pressure and temperature must also be considered.

Recommended Pumped fluid	"Fluid Concentration, temperature"	AVC(I)		AVS	
		EPDM	Viton	EPDM	Viton
Acetic acid anhydride	25°C				•
Alkaline cleaner		•			
Aluminium sulphate	10%,25°C				•
Ammonia water (A. hydroxide)	20%,40°C	•			
Ammonia hydrogen carbonate	10%,40°C	•		•	
Benzoic acid	10%,90°C				•
Boric acid	Unsaturated solution,60°C				•
Butanol	60°C	•			
Calcium acetate	30%,50°C	•			
Calcium hydroxide	Saturated solution,50°C	•			
Chromic acid	1%,20°C				•
Condensate	90°C	•			
Copper sulphate	Unsaturated solution,60°C				•
Deionic (fully desalinated water)	50°C			•	
Ethanol	100%,20°C	•			
Ethylene glycol/Diethylene glycol	40%,70°C	•	•	•	•
Fixer	25°C				•
Formic acid	5%,20°C			•	

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

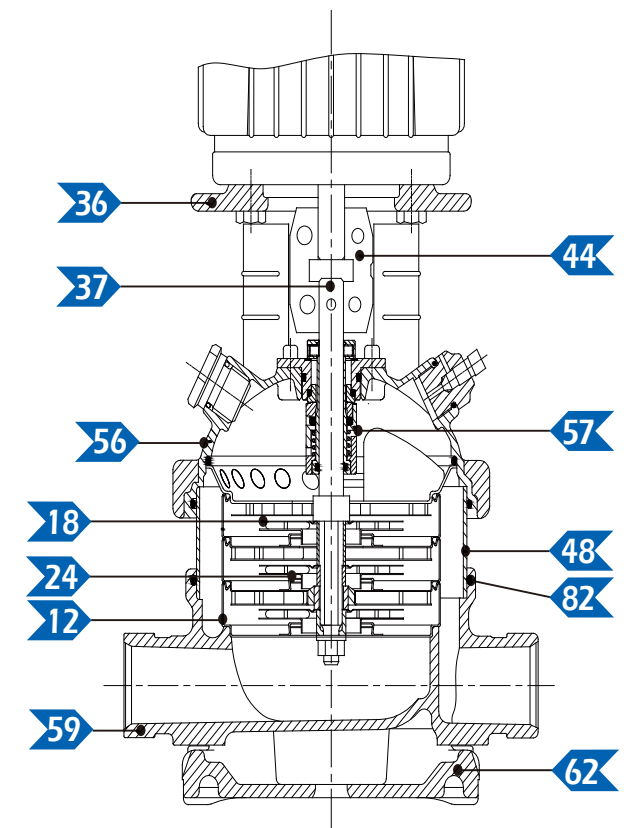
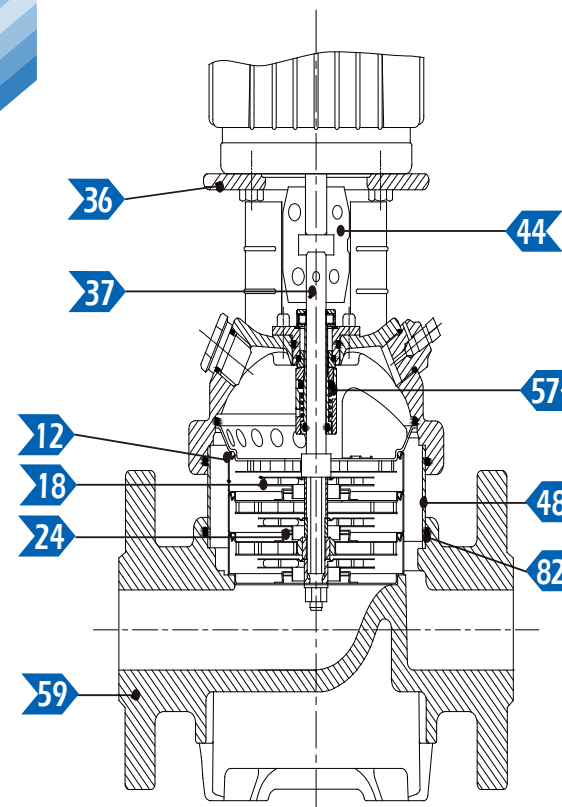
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

Recommended Pumped fluid	"Fluid Concentration, temperature"	AVC(I)		AVS	
		EPDM	Viton	EPDM	Viton
Fruit juice	50°C				●
Glycerine	50%, 50°C	●			
Heating oil (Light)		●			●
Hydraulic oil	100%, 100°C		●		
Isopropanol		●			
Lactic acid	10%, 20°C				●
Linoleic acid	100%, 20°C	●			
Linseed oil	60°C		●		
Liqueur	60°C				●
Maize oil	80°C		●		
Maleic acid	50%, 50°C				●
Methanol	100%, 20°C	●			
Motor oil	100%, 80°C	●			
Oil-water-mixture	100°C		●		
Oxalic acid	1%, 20°C				●
Peanut oil	100%, 80°C		●		
Phosphoric acid	20%, 20°C				●
Polyglycols	90°C		●		●
Polyethylene glycols	40%, 70°C	●			
Potassium carbonate	10%, 60°C	●			
Potassium hydrogen carbonate	10%, 60°C	●			
potassium permanganate	5%, 20°C				●
Potassium sulphate	Unsaturated solution, 80°C				●
Rapeseed oil	100%, 80°C		●		
Silicone oil	100%		●		
Sodium carbonate	10%, 60°C				●
Sodium hydroxide	25%, 50°C				●
Sodium nitrate	Unsaturated solution, 80°C				●
Sodium phosphate	5%, 100°C				●
Sodium sulphate	10%, 60°C				●
Sulphuric acid	5%, 25°C				●
Water					
Swimming pool water	35°C	● AVI			●
Deionic	50°C				●
Distilled water	50°C				●
Decarbonate water					●
Soft water					●
Heating water					●
Boiler water					●
Pure water					●
Rinsing water		● AVI			●

### Construction

AVC-1M,3M,5M,10M,15M,20M

AVI/S-1M,3M,5M,10M,15M,20M

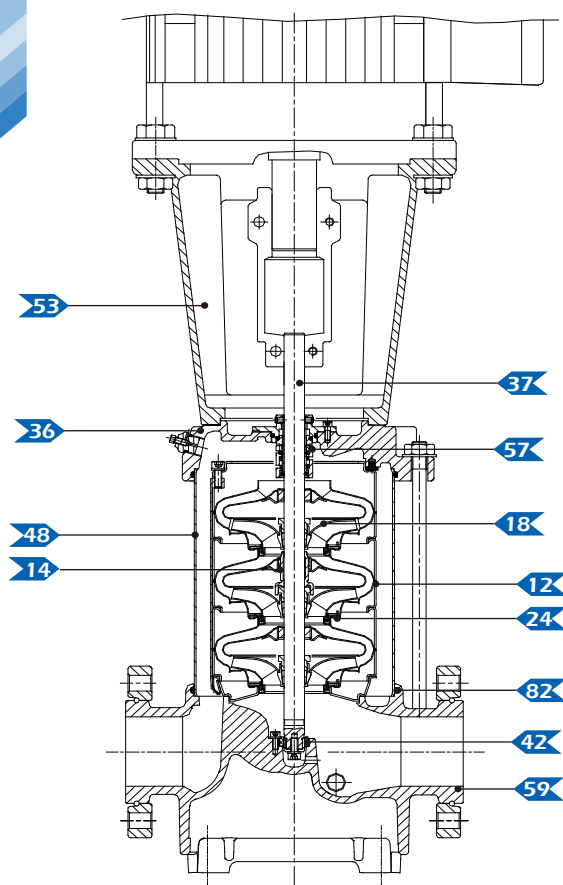


Pos.	Name	Material	Construction					
			AVC-1,3,5,10,15,20M		AVI-1,3,5,10,15,20M		AVS-1,3,5,10,15,20M	
			Standard Europe	Standard USA	Standard Europe	Standard USA	Standard Europe	Standard USA
36	Pump head	Cast Iron	EN-GJL-200	ASTM 25B	EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10	ASTM 65-45-12
56	Pump head cover	Stainless steel	N/A	N/A	1.4301	AISI 304	1.4401	AISI 316
18	Impeller	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
37	Shaft	Stainless steel	1.4057	AISI 431	1.4057	AISI 431	1.4401	AISI 316
48	Outer Sleeve	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
82	O-ring for outer sleeve	EPDM						
12	Chamber	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
24	Neck ring	PTFE						
59	Base	Cast Iron	EN-GJL-200	ASTM 25B	N/A	N/A	N/A	N/A
	Base	Stainless steel	N/A	N/A	1.4301	AISI 304	1.4401	AISI 316
62	Base plate	Cast Iron	N/A	N/A	EN-GJL-200	ASTM 25B	EN-GJL-200	ASTM 25B
44	Coupling	Fe-Cu-C	SINT C11	MPIF FC0525	SINT C11	MPIF FC0525	SINT C11	MPIF FC0525
57	Mechanical seal	Cartridge type						

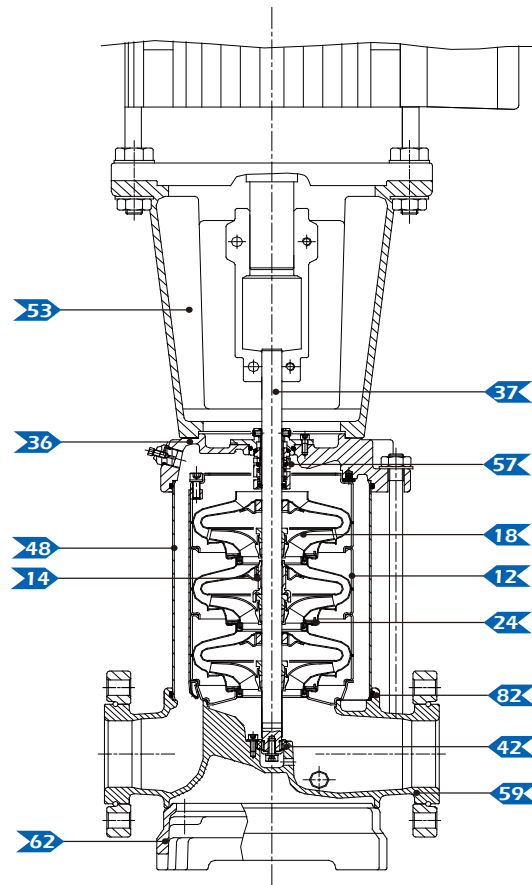
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Construction

AVC-32M,45M,64M,90M



AVI/S-32M,45M,64M,90M



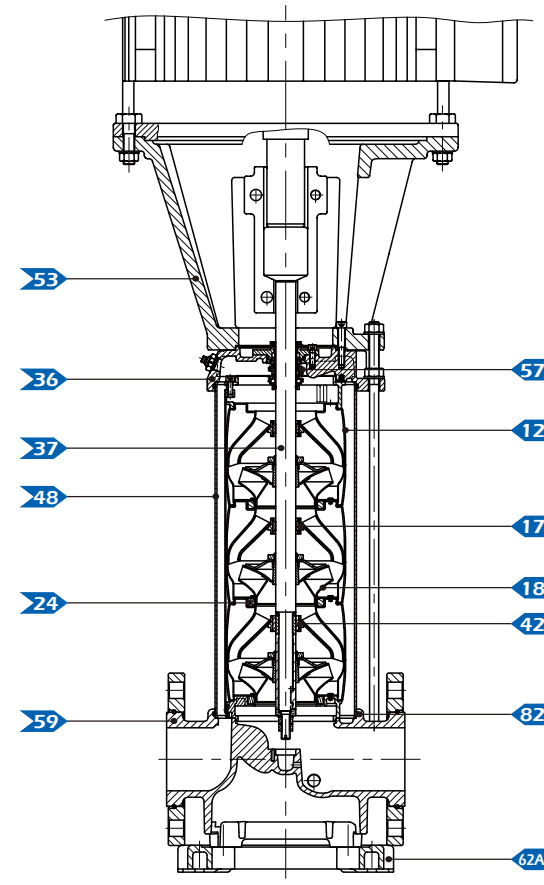
Pos.	Name	Material	Construction						
			AVC-32,45,64,90M		AVI-32,45,64,90M		AVS-32,45,64,90M		
			Standard Europe	USA	Standard Europe	USA	Standard Europe	USA	
36	Pump head	Cast iron	EN-GJL-250	ASTM 35B					
		Stainless steel			1.4301	AISI 304	1.4401	ASTM 35B	
53	Motor bracket	Cast iron	EN-GJL-250	ASTM 35B	EN-GJL-250	ASTM 35B	EN-GJL-250	AISI 316	
18	Impeller	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316	
37	Shaft	Stainless steel	1.4057	AISI 431	1.4057	AISI 431	1.4401	AISI 316	
48	Outer sleeve	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401		
82	O-ring for outer sleeve	EPDM						AISI 316	
12	Chamber	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401		
24	Neck ring	Carbon Fiber+POB+PTFE							N/A
59	Base	Cast iron	EN-GJL-250	ASTM 35B	N/A	N/A	N/A	AISI 316	
		Stainless steel	N/A	N/A	1.4301	AISI 304	1.4401	ASTM 35B	
62	Base plate	Cast iron	N/A	N/A	EN-GJL-250	ASTM 35B	EN-GJL-250		
57	Mechanical seal	Cartridge type							
14	Bearing ring		Bronze		Bronze		POB+Graphite+PTFE		
42	Bottom bearing ring	Tungsten carbide							

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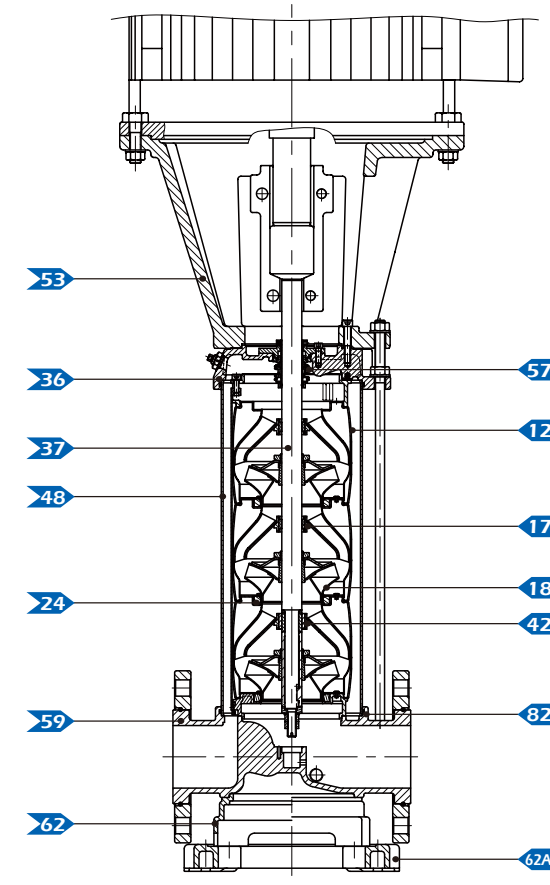
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Construction

AVC-120M,150M



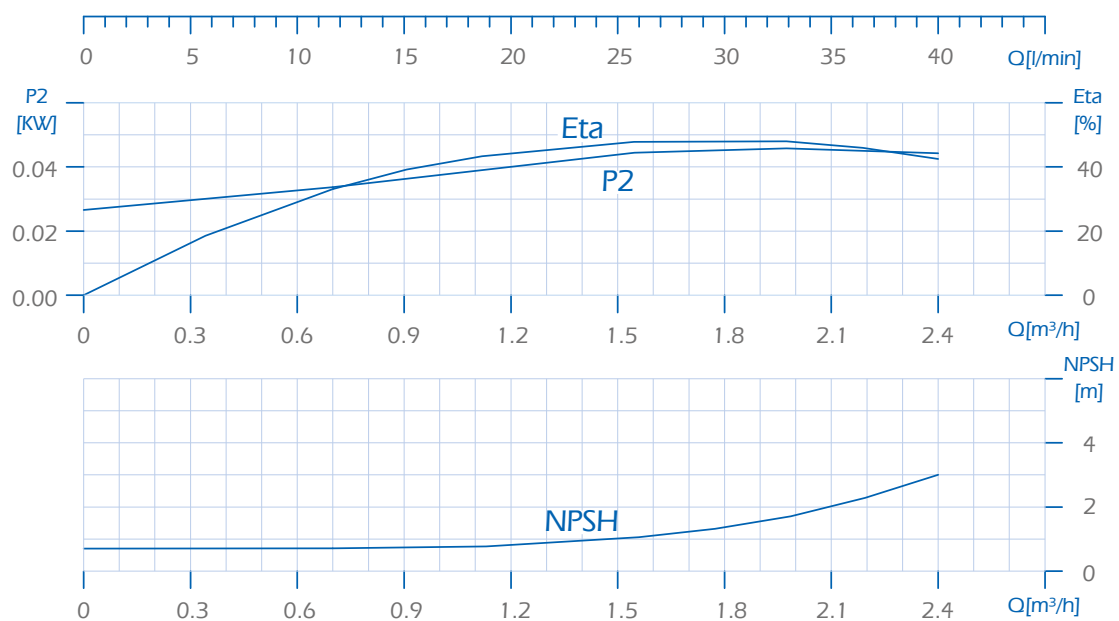
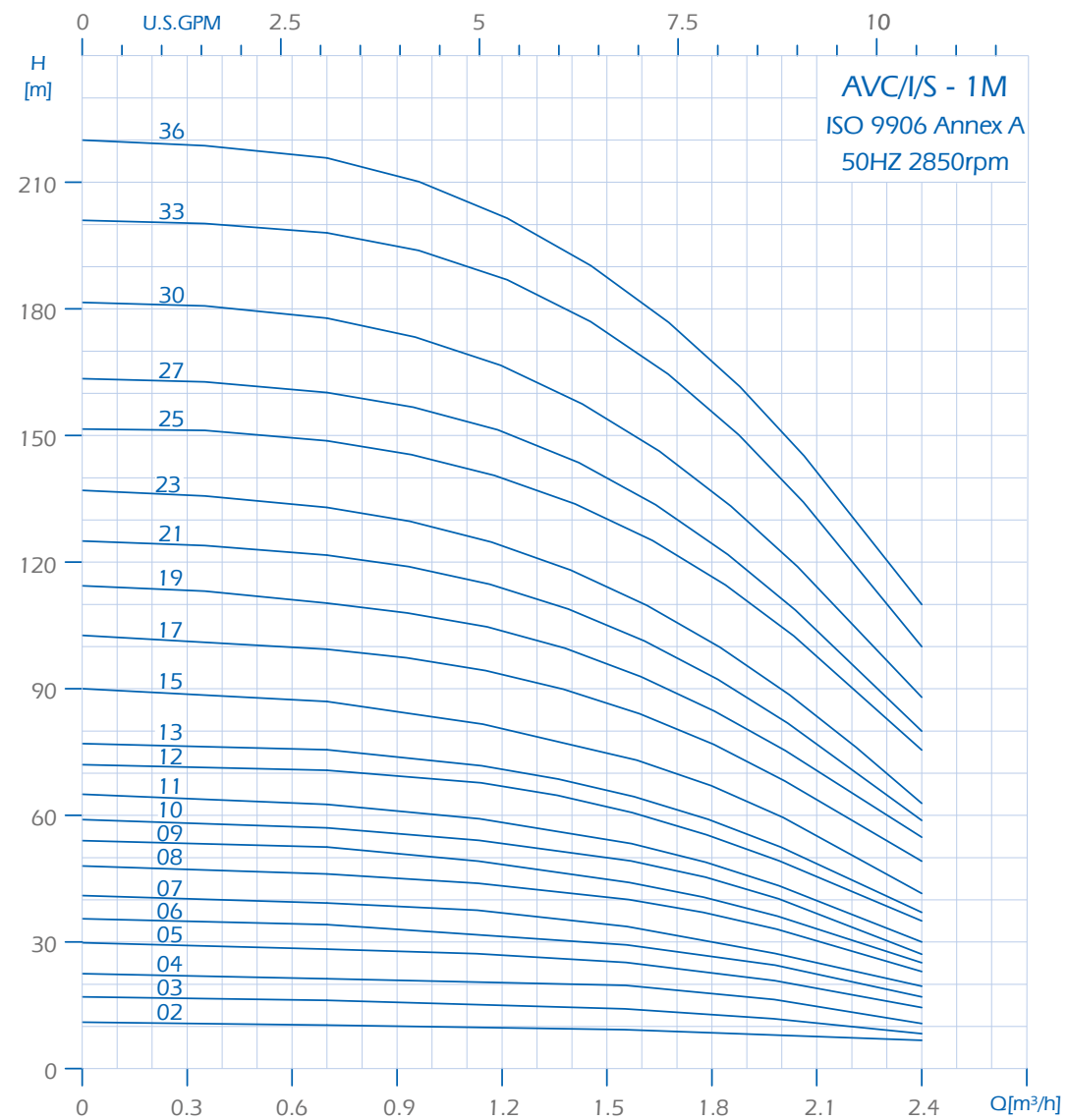
AVI/S-120M,150M



Pos.	Name	Material	Construction					
			AVC-120,150M		AVI-120,150M		AVS-120,150M	
			Standard Europe	USA	Standard Europe	USA	Standard Europe	USA
36	Pump head	Cast iron	EN-GJL-250	ASTM 35B	N/A	N/A	N/A	N/A
		Stainless steel	N/A	N/A	1.4301	AISI 304	1.4401	AISI 316
53	Motor bracket (15~60HP)	Cast iron	EN-GJL-250	ASTM 35B	EN-GJL-250	ASTM 35B	EN-GJL-250	ASTM 35B
		Motor bracket (75~100HP)	Cast iron	EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10
17	Bearing	PTFE						
18	Impeller	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
37	Shaft	Stainless steel	1.4057	AISI 431	1.4057	AISI 431	1.4401	AISI 316
48	Outer sleeve	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
82	O-ring for outer sleeve	EPDM						
12	Chamber	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
24	Neck ring	PTFE						
59	Base	Cast iron	EN-GJL-250	ASTM 35B	N/A	N/A	N/A	N/A
		Stainless steel	N/A	N/A	1.4301	AISI 304	1.4401	AISI 316
62	Base plate	Cast iron	N/A	N/A	EN-GJL-450-10	ASTM 65-45-12	EN-GJL-450-10	ASTM 65-45-12
62A	Base plate	Cast iron	EN-GJL-450-10	ASTM 65-45-12	EN-GJL-450-10	ASTM 65-45-12	EN-GJL-450-10	ASTM 65-45-12
57	Mechanical seal	Cartridge type						
42	Bottom bearing ring	SIC/SIC						

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

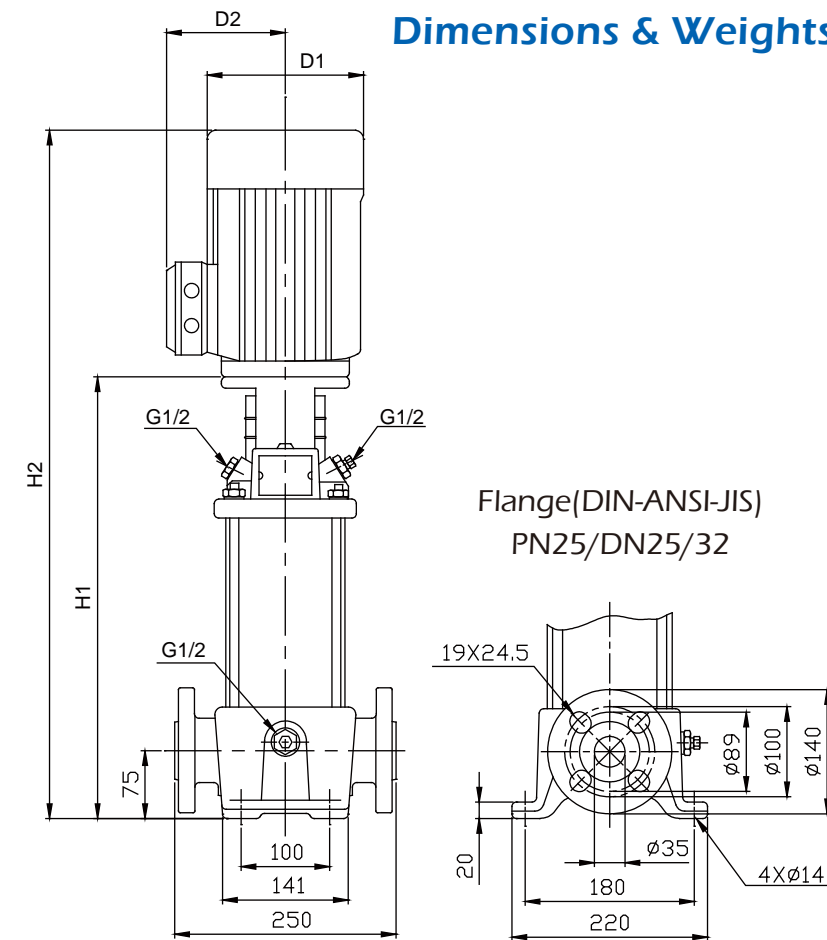
### Performance Curve



All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

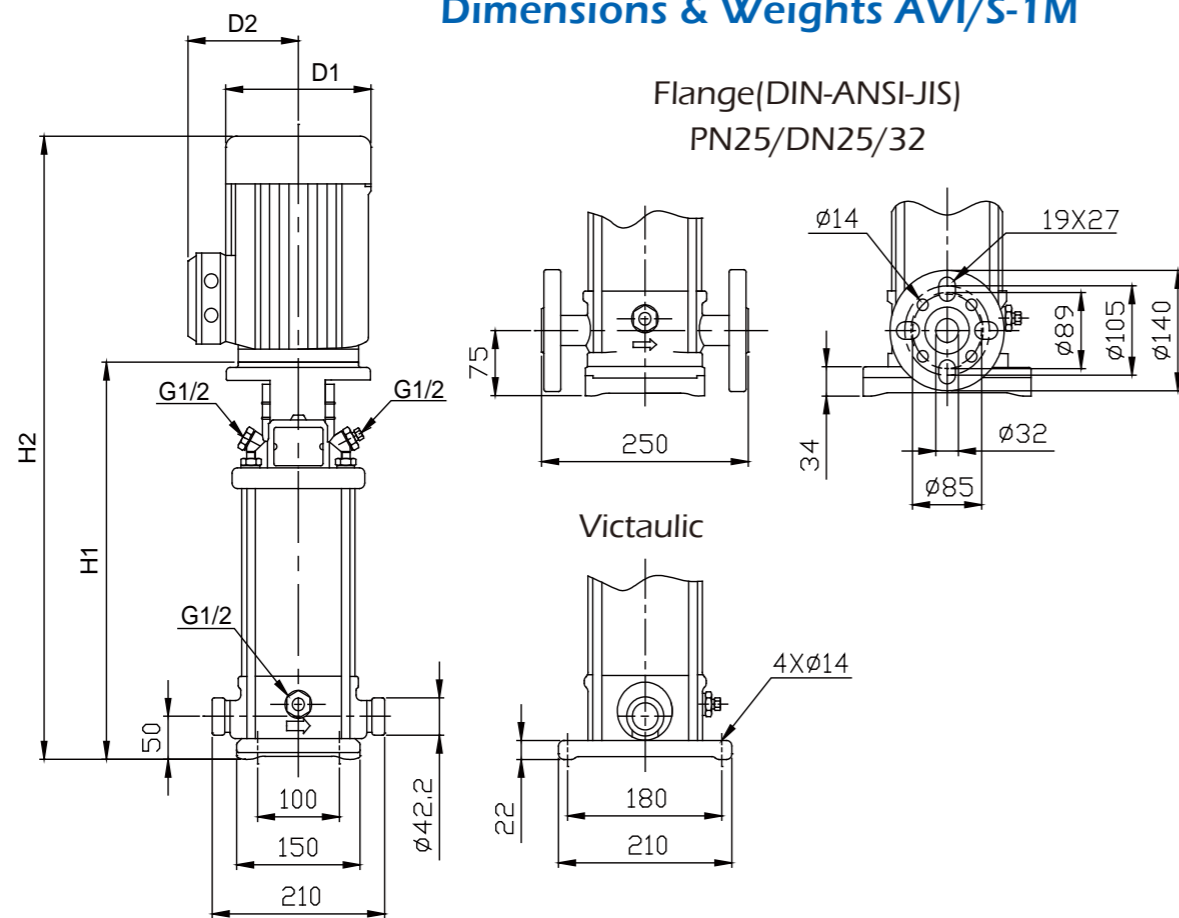
### Dimensions & Weights AVC-1M



Pump Type	Motor		Dimension (mm)				Net weight(kg)
	HP	P2 kw	DIN flange		D1	D2	
AVC-1M02	0.5	0.37	H1	H2	D1	D2	DIN flange
AVC-1M03	0.5	0.37	279	474	141	115	23.4
AVC-1M04	0.5	0.37	279	474	141	115	23.4
AVC-1M05	0.5	0.37	297	492	141	115	23.8
AVC-1M06	0.5	0.37	315	510	141	115	24.2
AVC-1M07	0.5	0.37	333	528	141	115	24.5
AVC-1M08	0.75	0.55	351	546	141	115	24.9
AVC-1M09	0.75	0.55	369	564	141	115	25.8
AVC-1M10	0.75	0.55	387	582	141	115	26.1
AVC-1M11	0.75	0.55	405	600	141	115	26.5
AVC-1M12	0.75	0.55	423	618	141	115	26.9
AVC-1M13	1	0.75	447	682	141	115	29.4
AVC-1M15	1	0.75	465	700	141	115	29.8
AVC-1M17	1	0.75	501	736	141	115	30.5
AVC-1M19	1.5	1.1	537	772	141	115	32.3
AVC-1M21	1.5	1.1	573	808	141	115	33.1
AVC-1M23	1.5	1.1	609	844	141	115	33.8
AVC-1M25	1.5	1.1	645	880	141	115	34.6
AVC-1M27	2	1.5	697	988	177	141	44.0
AVC-1M30	2	1.5	733	1024	177	141	44.8
AVC-1M33	2	1.5	787	1078	177	141	45.9
AVC-1M36	3	2.2	841	1132	177	141	49.9
AVC-1M36	3	2.2	895	1186	177	141	51.0

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVI/S-1M

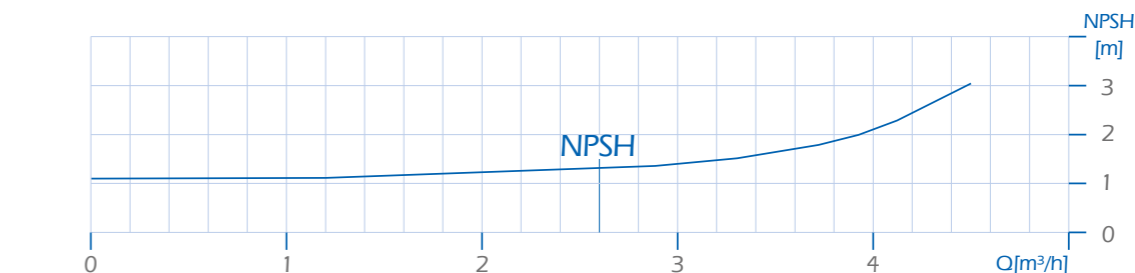
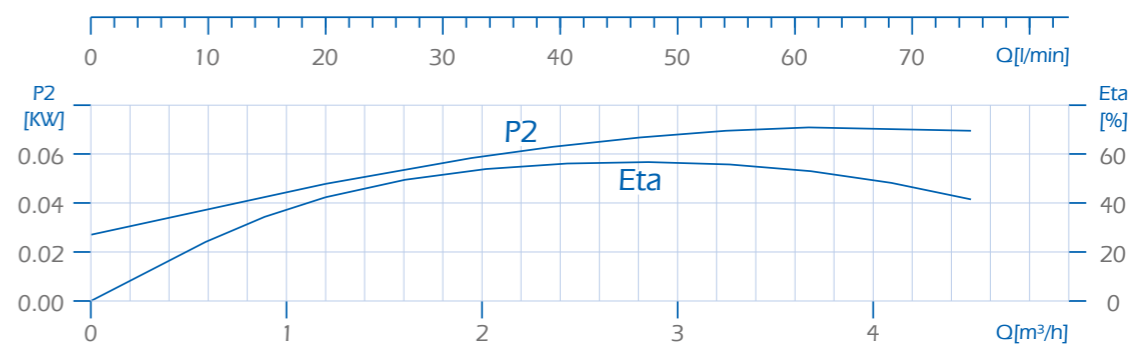
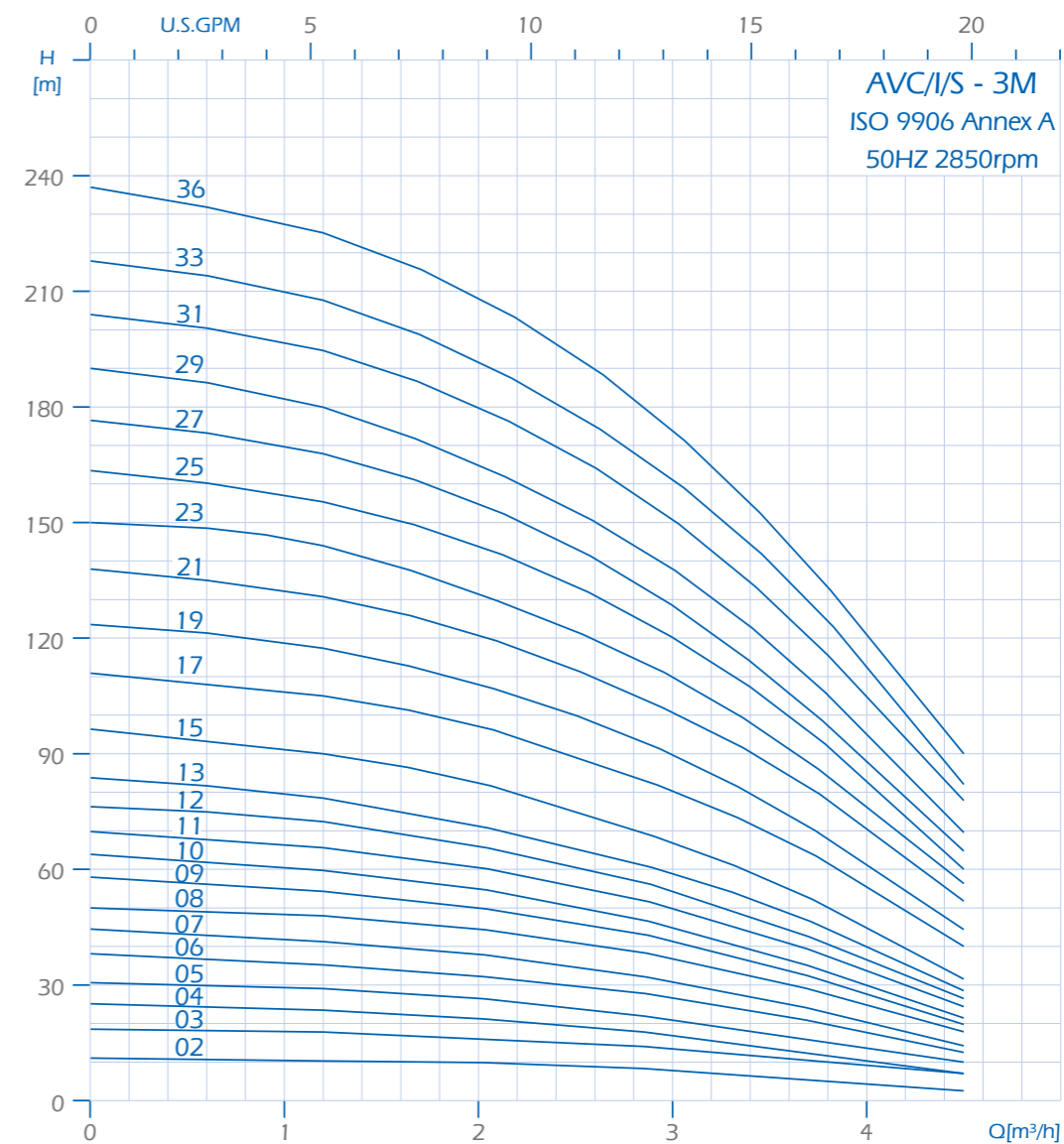


Pump Type	Motor		Dimension (mm)								Net weight(kg)	
	P <sub>2</sub>		Victaulic		DIN flange		DIN		Victaulic	DIN flange		
	HP	kw	H1	H2	H1	H2	D1	D2				
AVI/AVS-1M02	0.5	0.37	257	452	282	477	141	115	19.3	20.2		
AVI/AVS-1M03	0.5	0.37	257	452	282	477	141	115	19.3	20.3		
AVI/AVS-1M04	0.5	0.37	275	470	300	495	141	115	19.7	20.6		
AVI/AVS-1M05	0.5	0.37	293	488	318	513	141	115	20.1	21.0		
AVI/AVS-1M06	0.5	0.37	311	506	336	531	141	115	20.4	21.4		
AVI/AVS-1M07	0.5	0.37	329	524	354	549	141	115	20.8	21.7		
AVI/AVS-1M08	0.75	0.55	347	542	372	567	141	115	21.7	22.6		
AVI/AVS-1M09	0.75	0.55	365	560	390	585	141	115	22.0	23.0		
AVI/AVS-1M10	0.75	0.55	383	578	408	603	141	115	22.4	23.3		
AVI/AVS-1M11	0.75	0.55	401	596	426	621	141	115	22.8	23.7		
AVI/AVS-1M12	1	0.75	425	660	450	685	141	115	25.2	26.1		
AVI/AVS-1M13	1	0.75	443	678	468	703	141	115	25.6	26.5		
AVI/AVS-1M15	1	0.75	479	714	504	739	141	115	26.3	27.2		
AVI/AVS-1M17	1.5	1.1	515	750	540	775	141	115	28.1	29.1		
AVI/AVS-1M19	1.5	1.1	551	786	576	811	141	115	28.8	29.8		
AVI/AVS-1M21	1.5	1.1	587	822	612	847	141	115	29.6	30.6		
AVI/AVS-1M23	1.5	1.1	623	858	648	883	141	115	30.4	31.3		
AVI/AVS-1M25	2	1.5	675	966	700	991	177	141	39.8	40.8		
AVI/AVS-1M27	2	1.5	711	1002	736	1027	177	141	40.6	41.5		
AVI/AVS-1M30	2	1.5	765	1056	790	1081	177	141	41.7	42.6		
AVI/AVS-1M33	3	2.2	819	1110	844	1135	177	141	45.6	46.6		
AVI/AVS-1M36	3	2.2	873	1164	898	1189	177	141	46.7	47.7		

All technical information is subject to change without notice.

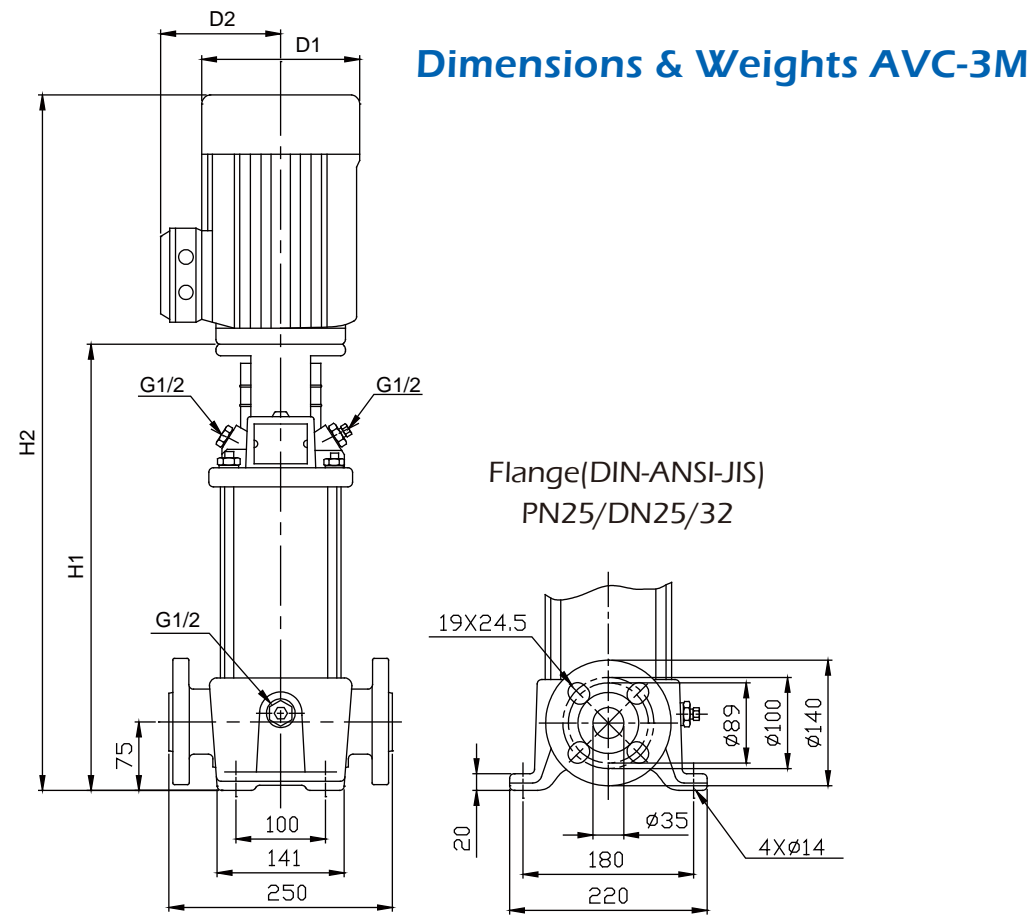
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Performance Curve





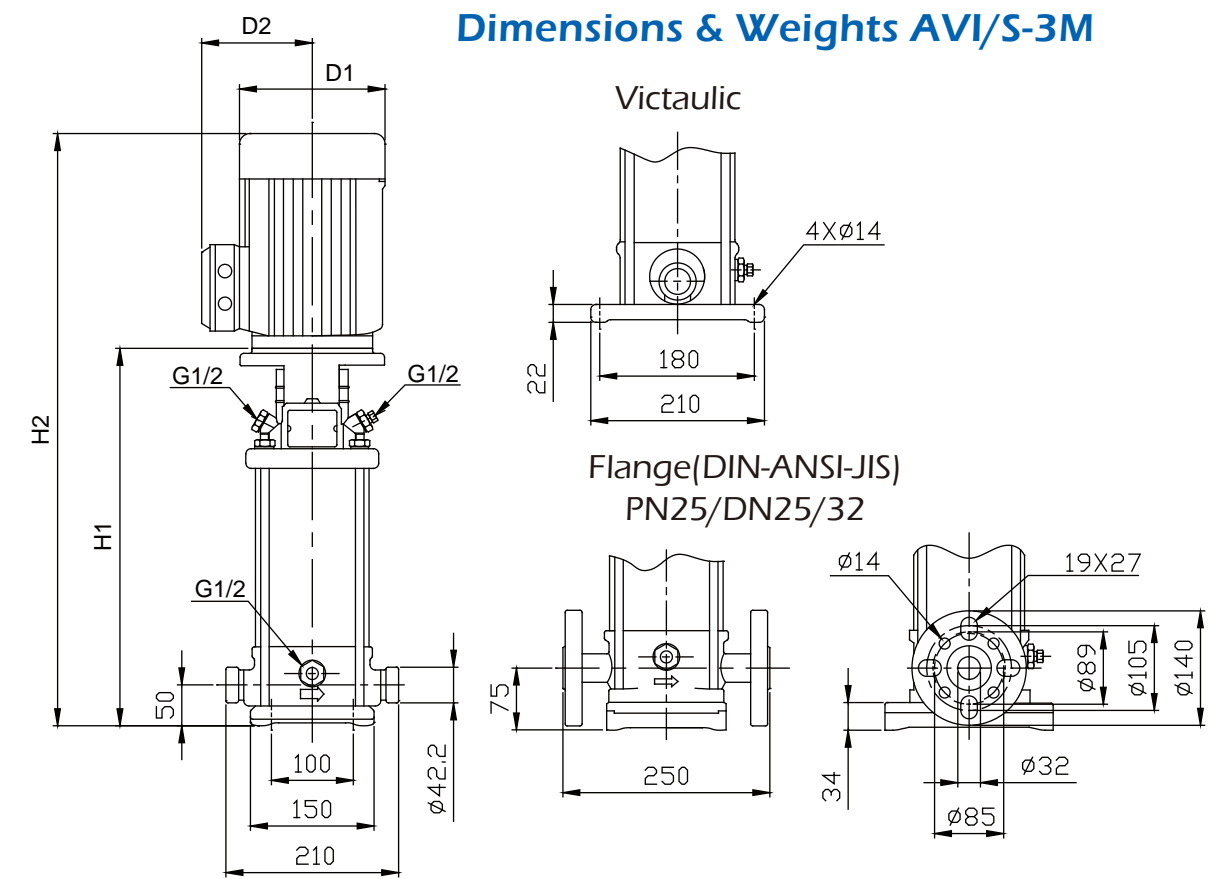
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps



Pump Type	Motor		Dimension (mm)				Net weight(kg)
	P2		DIN flange		D1	D2	
	HP	kw	H1	H2			
AVC-3M02	0.5	0.37	279	474	141	115	23.4
AVC-3M03	0.5	0.37	279	474	141	115	23.4
AVC-3M04	0.5	0.37	297	492	141	115	23.8
AVC-3M05	0.5	0.37	315	510	141	115	24.2
AVC-3M06	0.75	0.55	333	528	141	115	25.0
AVC-3M07	0.75	0.55	351	546	141	115	25.4
AVC-3M08	1	0.75	375	610	141	115	27.9
AVC-3M09	1	0.75	393	628	141	115	28.3
AVC-3M10	1	0.75	411	646	141	115	28.7
AVC-3M11	1.5	1.1	429	664	141	115	30.2
AVC-3M12	1.5	1.1	447	682	141	115	30.5
AVC-3M13	1.5	1.1	465	700	141	115	30.9
AVC-3M15	1.5	1.1	501	736	141	141	31.6
AVC-3M17	2	1.5	553	844	177	141	41.0
AVC-3M19	2	1.5	589	880	177	141	41.8
AVC-3M21	3	2.2	625	916	177	141	45.3
AVC-3M23	3	2.2	661	952	177	141	46.1
AVC-3M25	3	2.2	697	988	177	141	46.8
AVC-3M27	3	2.2	733	1024	177	141	47.6
AVC-3M29	3	2.2	769	1060	177	141	48.3
AVC-3M31	4	3	809	1125	197	147	56.6
AVC-3M33	4	3	845	1161	197	147	57.4
AVC-3M36	4	3	899	1215	197	147	58.5

All technical information is subject to change without notice.

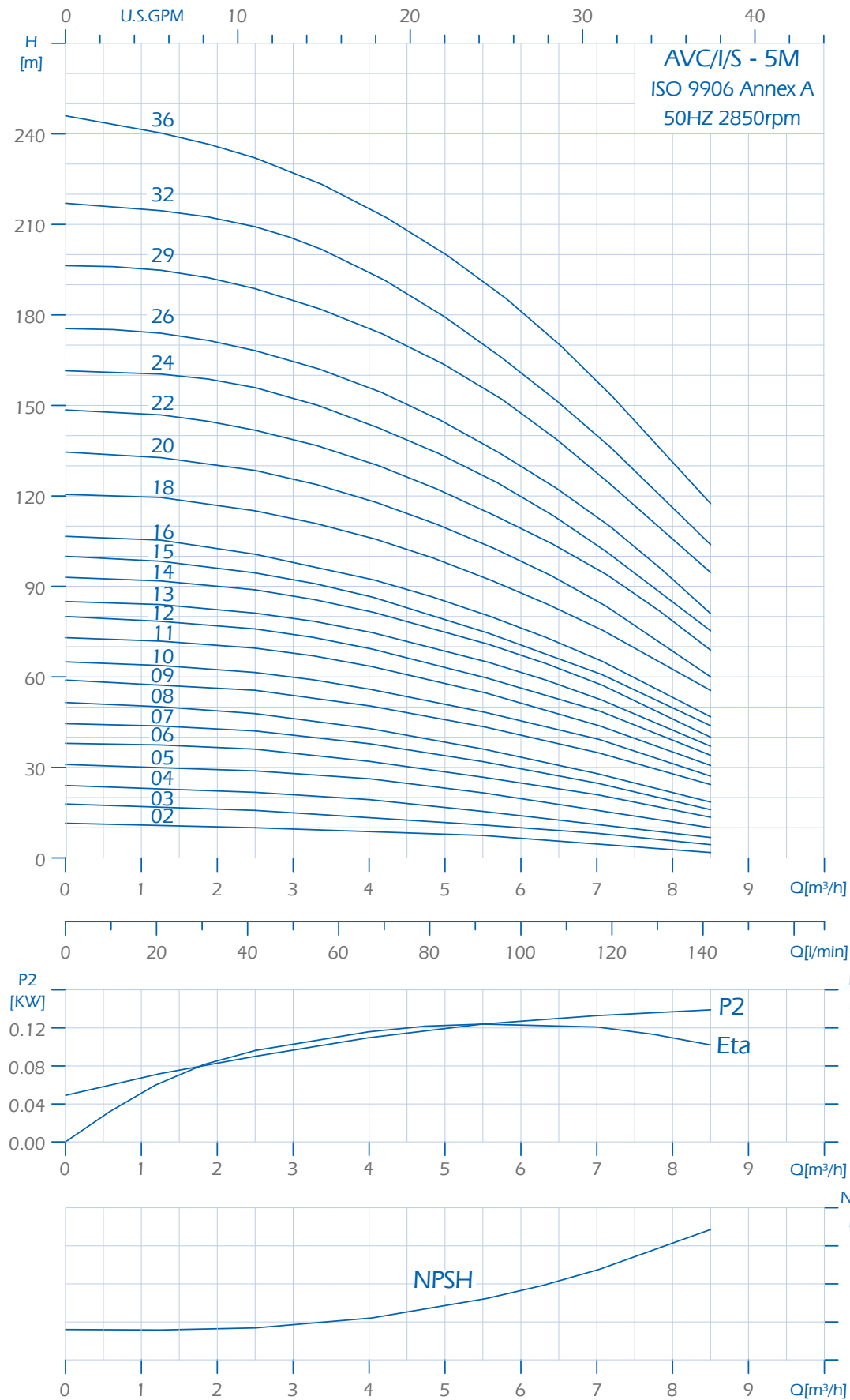
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps



Pump Type	Motor		Dimension (mm)				Net weight(kg)			
	P2		Victaulic		DIN flange		Victaulic	DIN flange		
	HP	kw	H1	H2	H1	H2				
AVI/AVS-3M02	0.5	0.37	257	452	282	477	141	115	19.3	20.2
AVI/AVS-3M03	0.5	0.37	257	452	282	477	141	115	19.3	20.3
AVI/AVS-3M04	0.5	0.37	275	470	300	495	141	115	19.7	20.6
AVI/AVS-3M05	0.5	0.37	293	488	318	513	141	115	20.1	21.0
AVI/AVS-3M06	0.75	0.55	311	506	336	531	141	115	20.9	21.9
AVI/AVS-3M07	0.75	0.55	329	524	354	549	141	115	21.3	22.2
AVI/AVS-3M08	1	0.75	353	588	378	613	141	115	23.7	24.6
AVI/AVS-3M09	1	0.75	371	606	396	631	141	115	24.0	25.0
AVI/AVS-3M10	1	0.75	389	624	414	649	141	115	24.4	25.4
AVI/AVS-3M11	1.5	1.1	407	642	432	667	141	115	25.9	26.9
AVI/AVS-3M12	1.5	1.1	425	660	450	685	141	115	26.3	27.2
AVI/AVS-3M13	1.5	1.1	443	678	468	703	141	115	26.7	27.6
AVI/AVS-3M15	1.5	1.1	479	714	504	739	141	115	27.4	28.3
AVI/AVS-3M17	2	1.5	531	822	556	847	177	141	36.9	37.8
AVI/AVS-3M19	2	1.5	567	858	592	883	177	141	37.6	38.5
AVI/AVS-3M21	3	2.2	603	894	628	919	177	141	41.2	42.1
AVI/AVS-3M23	3	2.2	639	930	664	955	177	141	41.9	42.9
AVI/AVS-3M25	3	2.2	675	966	700	991	177	141	42.6	43.6
AVI/AVS-3M27	3	2.2	711	1002	736	1027	177	141	43.4	44.3
AVI/AVS-3M29	3	2.2	747	1038	772	1063	177	141	44.1	45.1
AVI/AVS-3M31	4	3	787	1103	812	1128	197	147	52.0	53.0
AVI/AVS-3M33	4	3	823	1139	848	1164	197	147	52.8	53.7
AVI/AVS-3M36	4	3	877	1193	902	1218	197	147	53.9	54.8

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

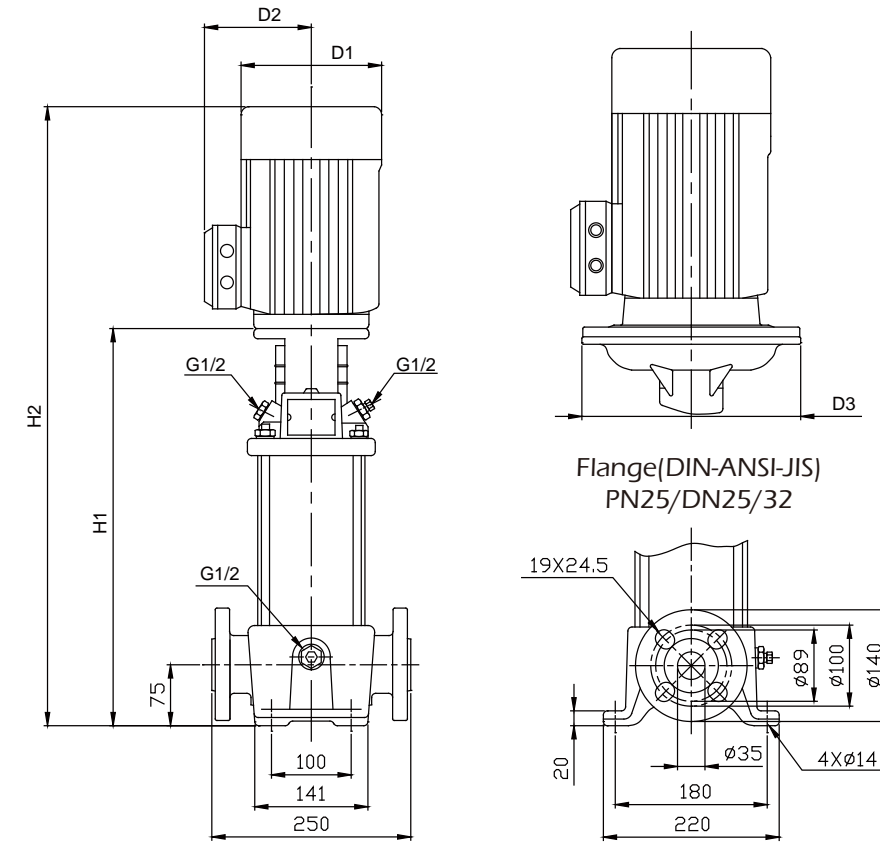
### Performance Curve



All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

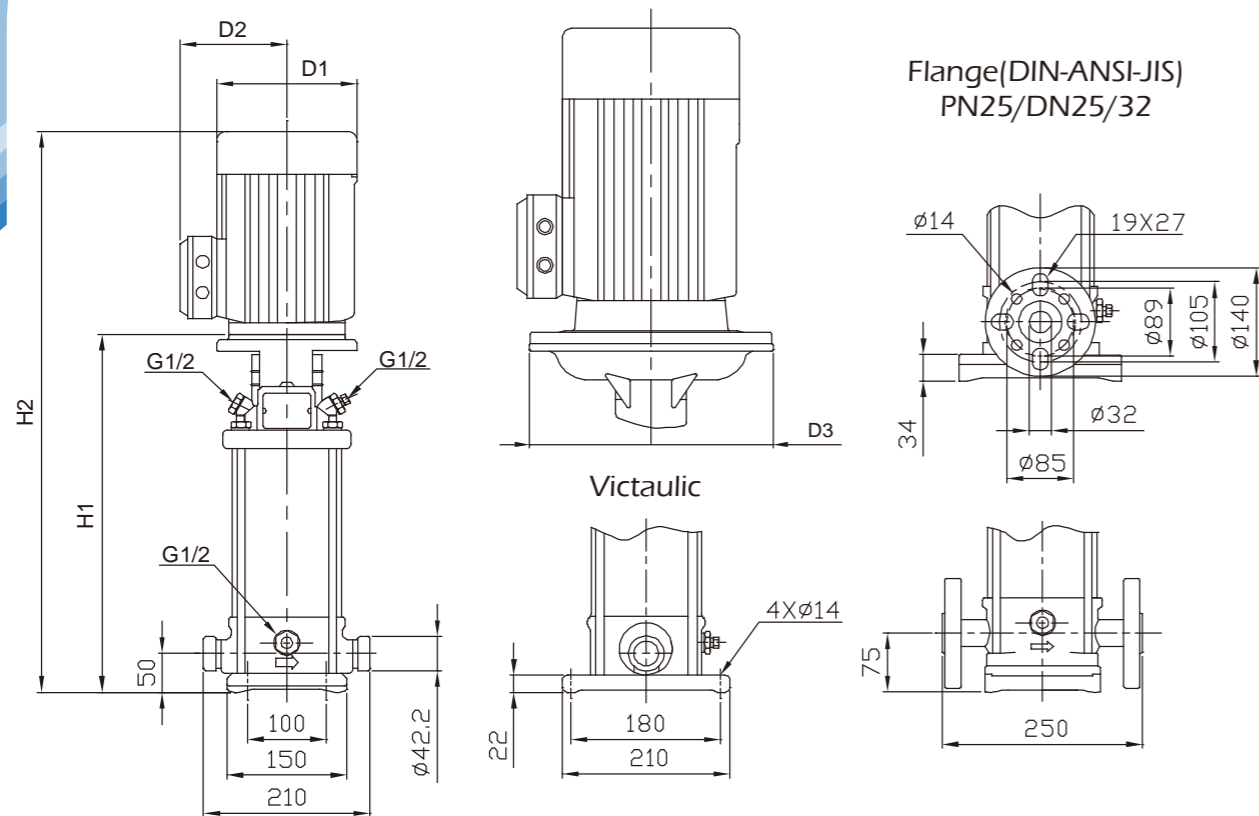
### Dimensions & Weights AVC-5M



Pump Type	Motor		Dimension (mm)					Net weight(kg)
	HP	P2 kw	DIN flange		D1	D2	D3	DIN flange
AVC-5M02	0.5	0.37	H1	H2	141	115	-	23.3
AVC-5M03	0.75	0.55	279	474	141	115	-	24.2
AVC-5M04	0.75	0.55	306	501	141	115	-	24.8
AVC-5M05	1	0.75	333	528	141	115	-	27.4
AVC-5M06	1.5	1.1	366	601	141	115	-	29.1
AVC-5M07	1.5	1.1	393	628	141	115	-	29.6
AVC-5M08	1.5	1.1	420	655	141	115	-	29.6
AVC-5M09	2	1.5	447	682	141	115	-	30.1
AVC-5M10	2	1.5	490	781	177	141	-	39.3
AVC-5M11	3	2.2	517	808	177	141	-	39.9
AVC-5M12	3	2.2	544	835	177	141	-	43.2
AVC-5M13	3	2.2	571	862	177	141	-	43.7
AVC-5M14	3	2.2	598	889	177	141	-	44.2
AVC-5M15	3	2.2	625	916	177	141	-	44.8
AVC-5M16	3	2.2	652	943	177	141	-	45.2
AVC-5M18	3	2.2	679	970	177	141	-	45.8
AVC-5M20	4	3	737	1053	197	147	-	54.3
AVC-5M22	4	3	791	1107	197	147	-	55.5
AVC-5M24	5.5	4	845	1171	220	161	-	59.8
AVC-5M26	5.5	4	899	1225	220	161	-	60.8
AVC-5M29	5.5	4	953	1279	220	161	-	62.7
AVC-5M32	7.5	5.5	1034	1360	220	161	-	64.6
AVC-5M36	7.5	5.5	1145	1507	235	197	300	90.1
			1253	1615	235	197	300	92.6

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVI/S-5M

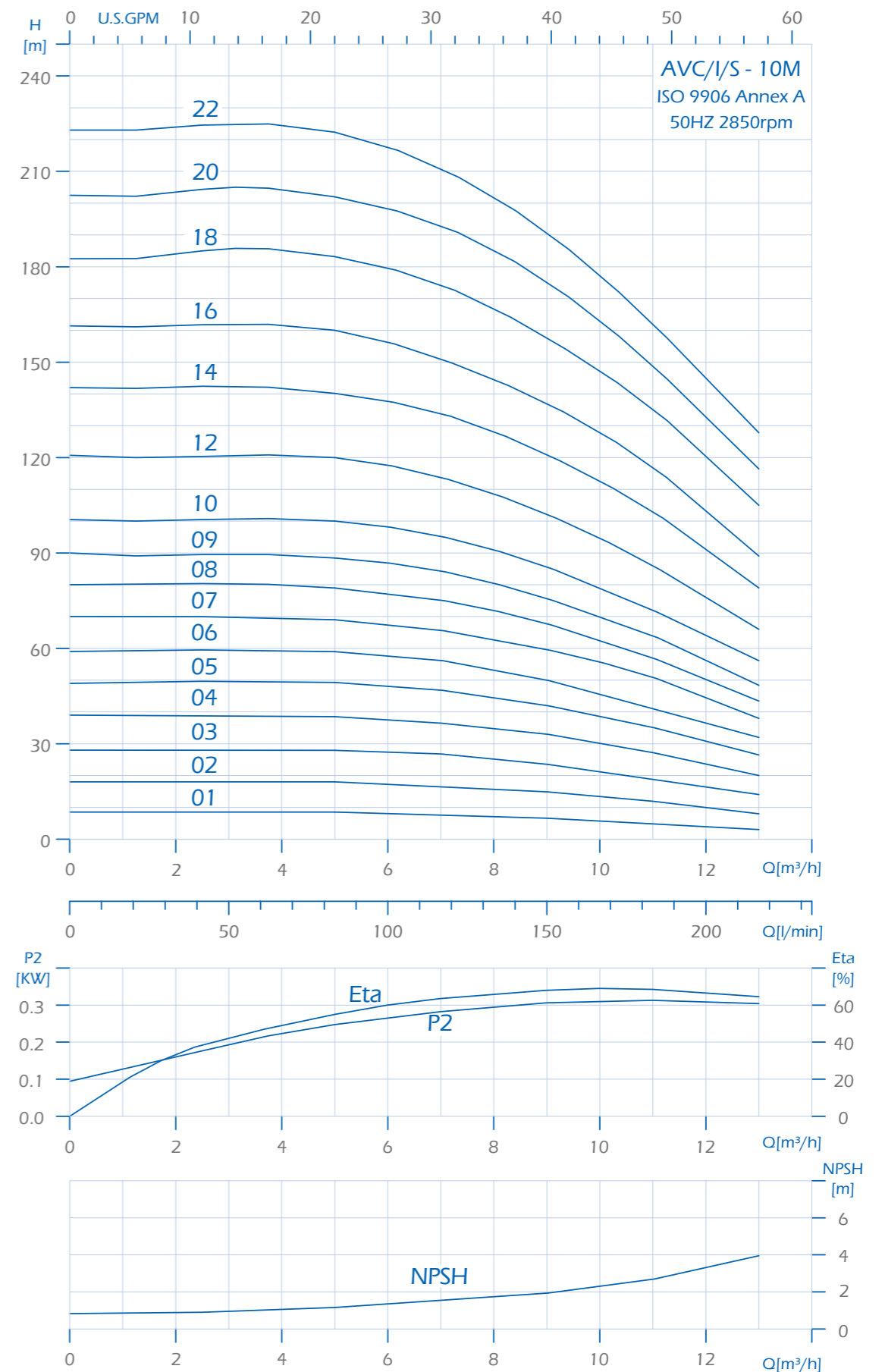


Pump Type	Motor		Dimension (mm)								Net weight(kg)	
	P <sub>2</sub>		Victaulic		DIN flange		D1	D2	D3	Victaulic	DIN flange	
	HP	kw	H1	H2	H1	H2						
AVI/AVS-5M02	0.5	0.37	257	452	282	477	141	115	-	19.2	20.1	
AVI/AVS-5M03	0.75	0.55	284	479	309	504	141	115	-	20.3	21.2	
AVI/AVS-5M04	0.75	0.55	311	506	336	531	141	115	-	20.8	21.8	
AVI/AVS-5M05	1	0.75	344	579	369	604	141	115	-	23.4	24.3	
AVI/AVS-5M06	1.5	1.1	371	606	396	631	141	115	-	25.1	26.0	
AVI/AVS-5M07	1.5	1.1	398	633	423	658	141	115	-	25.6	26.5	
AVI/AVS-5M08	1.5	1.1	425	660	450	685	141	115	-	26.1	27.1	
AVI/AVS-5M09	2	1.5	468	759	493	784	177	141	-	35.4	36.4	
AVI/AVS-5M10	2	1.5	495	786	520	811	177	141	-	36.0	36.9	
AVI/AVS-5M11	3	2.2	522	813	547	838	177	141	-	39.3	40.3	
AVI/AVS-5M12	3	2.2	549	840	574	865	177	141	-	39.9	40.8	
AVI/AVS-5M13	3	2.2	576	867	601	892	177	141	-	40.4	41.4	
AVI/AVS-5M14	3	2.2	603	894	628	919	177	141	-	41.0	41.9	
AVI/AVS-5M15	3	2.2	630	921	655	946	177	141	-	41.5	42.5	
AVI/AVS-5M16	3	2.2	657	948	682	973	177	141	-	42.1	43.0	
AVI/AVS-5M18	4	3	715	1031	740	1056	197	147	-	50.3	51.3	
AVI/AVS-5M20	4	3	769	1085	794	1110	197	147	-	51.6	52.5	
AVI/AVS-5M22	5.5	4	823	1149	848	1174	220	161	-	55.8	56.8	
AVI/AVS-5M24	5.5	4	877	1203	902	1228	220	161	-	56.9	57.8	
AVI/AVS-5M26	5.5	4	931	1257	956	1282	220	161	-	58.0	58.9	
AVI/AVS-5M29	5.5	4	1012	1338	1037	1363	220	161	-	59.7	60.6	
AVI/AVS-5M32	7.5	5.5	1123	1485	1148	1510	235	197	300	84.9	85.8	
AVI/AVS-5M36	7.5	5.5	1231	1593	1256	1618	235	197	300	87.1	88.1	

All technical information is subject to change without notice.

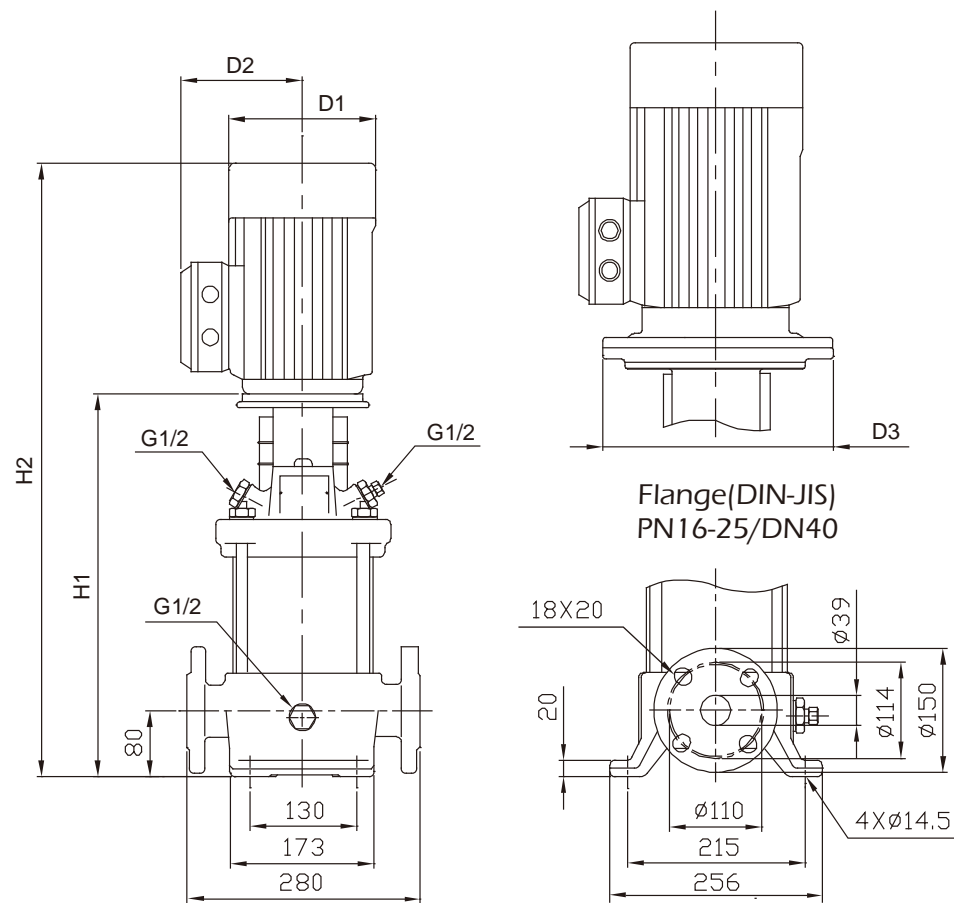
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Performance Curve



## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVC-10M

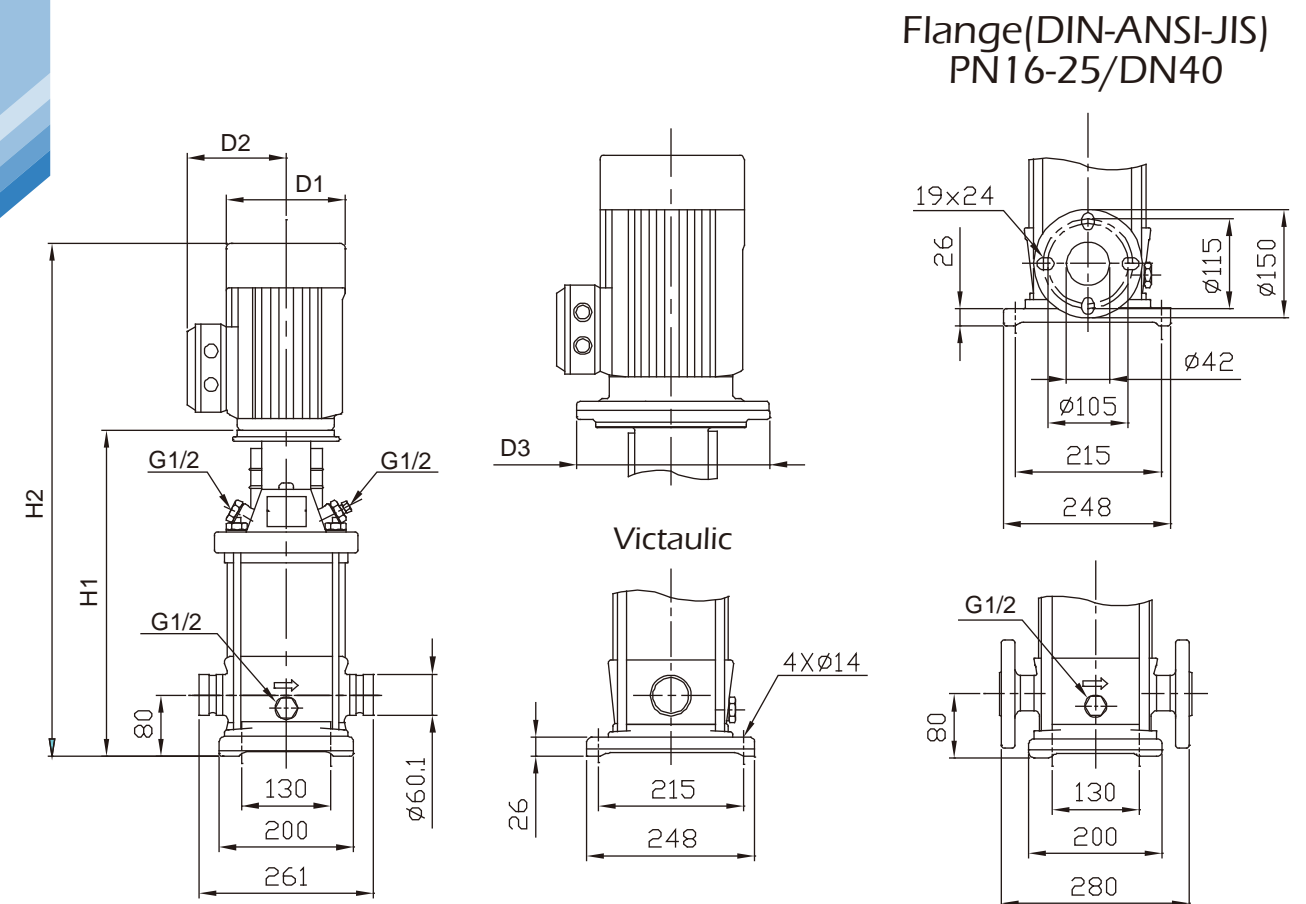


Pump Type	Motor		Dimension (mm)						Net weight(kg)
	P <sub>2</sub>		DIN flange		D1	D2	D3	DIN flange	
	HP	kw	H1	H2					
AVC-10M01	0.5	0.37	343	538	141	115	-	35.9	
AVC-10M02	1	0.75	347	582	141	115	-	38.2	
AVC-10M03	1.5	1.1	377	612	141	115	-	40.3	
AVC-10M04	2	1.5	423	714	177	141	-	50.1	
AVC-10M05	3	2.2	453	744	177	141	-	53.9	
AVC-10M06	3	2.2	483	774	177	141	-	55.0	
AVC-10M07	4	3	518	834	197	147	-	63.8	
AVC-10M08	4	3	548	864	197	147	-	64.9	
AVC-10M09	4	3	578	894	197	147	-	65.9	
AVC-10M10	5.5	4	608	934	220	161	-	70.3	
AVC-10M12	5.5	4	668	994	220	161	-	72.4	
AVC-10M14	7.5	5.5	760	1122	235	197	300	104.1	
AVC-10M16	7.5	5.5	820	1182	235	197	300	106.2	
AVC-10M18	10	7.5	880	1278	235	197	300	113.6	
AVC-10M20	10	7.5	940	1338	235	197	300	116.7	
AVC-10M22	10	7.5	1000	1398	235	197	300	118.8	

All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

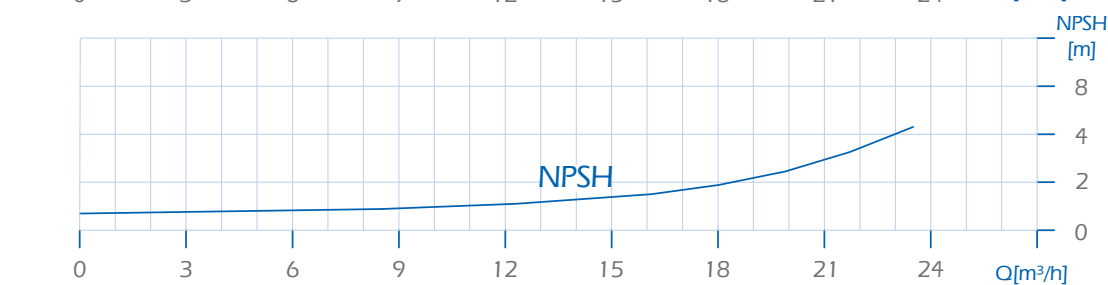
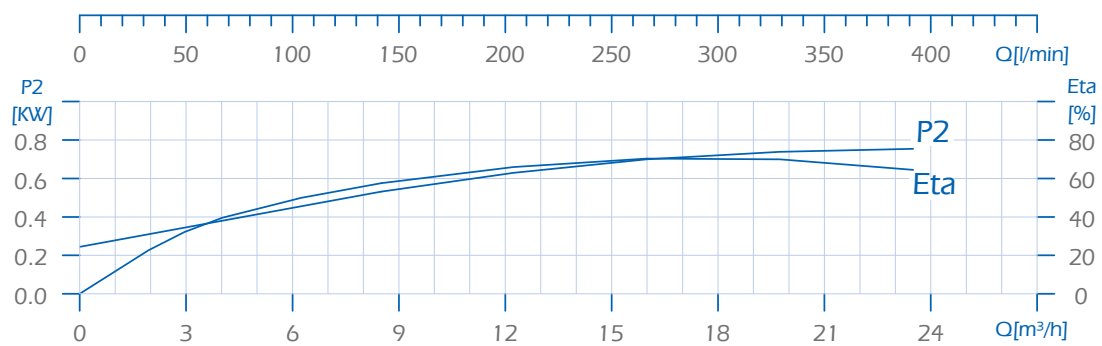
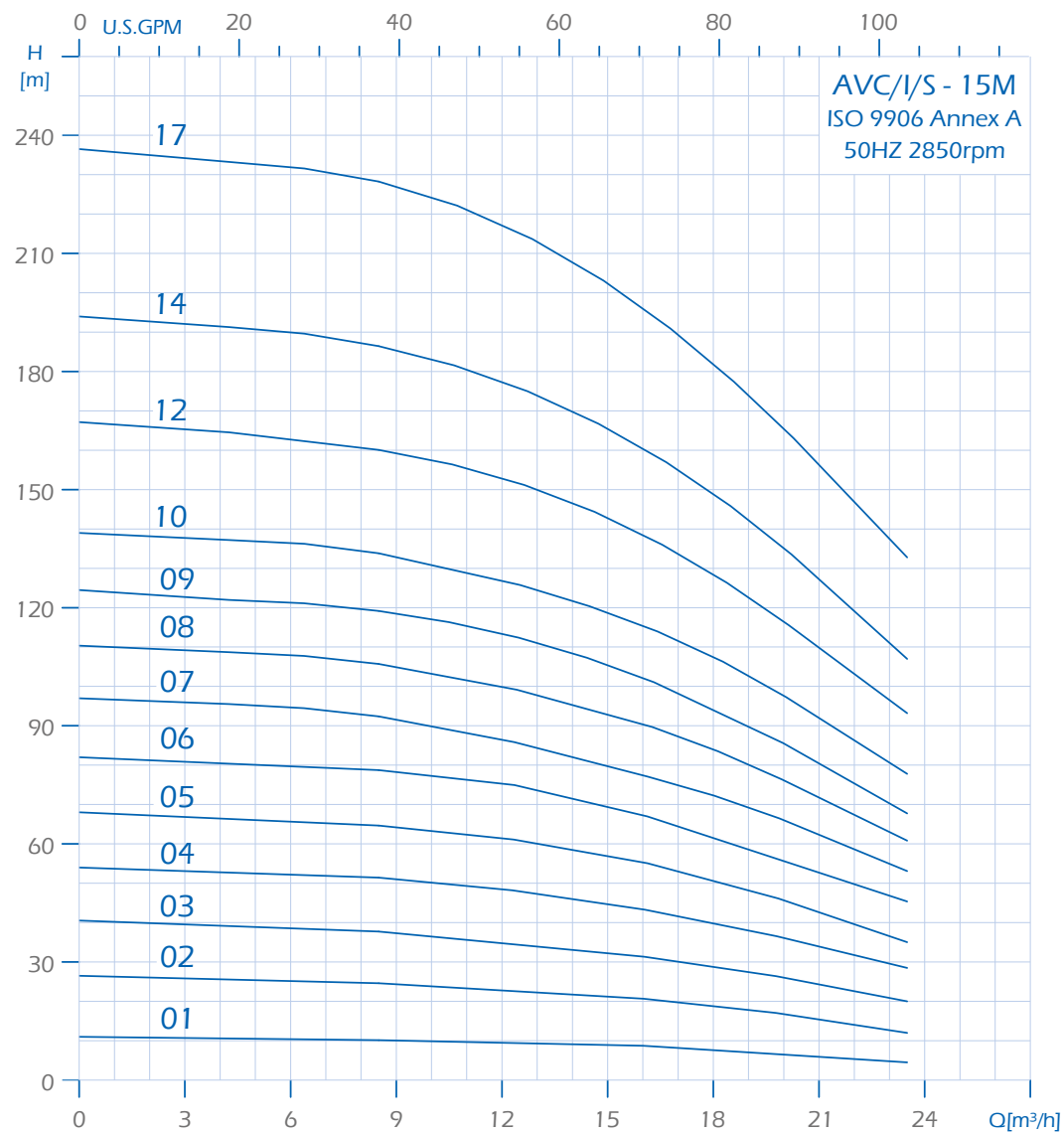
### Dimensions & Weights AVI/S-10M



Pump Type	Motor		Dimension (mm)							Net weight(kg)		
	P <sub>2</sub>		Victaulic		DIN flange			D1	D2	D3	Victaulic	DIN flange
	HP	kw	H1	H2	H1	H2						
AVI/AVS-10M01	0.5	0.37	353	548	353	548	141	115	-	31.6	31.4	
AVI/AVS-10M02	1	0.75	357	592	357	592	141	115	-	34.3	34.2	
AVI/AVS-10M03	1.5	1.1	387	622	387	622	141	115	-	36.4	36.3	
AVI/AVS-10M04	2	1.5	433	724	433	724	177	141	-	46.1	46.0	
AVI/AVS-10M05	3	2.2	463	754	463	754	177	141	-	50.0	49.8	
AVI/AVS-10M06	3	2.2	493	784	493	784	177	141	-	51.0	50.8	
AVI/AVS-10M07	4	3	528	844	528	844	197	147	-	59.1	58.9	
AVI/AVS-10M08	4	3	558	874	558	874	197	147	-	60.1	60.0	
AVI/AVS-10M09	4	3	588	904	588	904	197	147	-	61.1	61.0	
AVI/AVS-10M10	5.5	4	618	944	618	944	220	161	-	65.6	65.4	
AVI/AVS-10M12	5.5	4	678	1004	678	1004	220	161	-	67.6	67.5	
AVI/AVS-10M14	7.5	5.5	770	1132	770	1132	235	197	300	100.4	100.3	
AVI/AVS-10M16	7.5	5.5	830	1192	830	1192	235	197	300	102.5	102.4	
AVI/AVS-10M18	10	7.5	890	1288	890	1288	235	197	300	110.9	110.8	
AVI/AVS-10M20	10	7.5	950	1348	950	1348	235	197	300	113.0	112.8	
AVI/AVS-10M22	10	7.5	1010	1408	1010	1408	235	197	300	115.1	114.9	

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

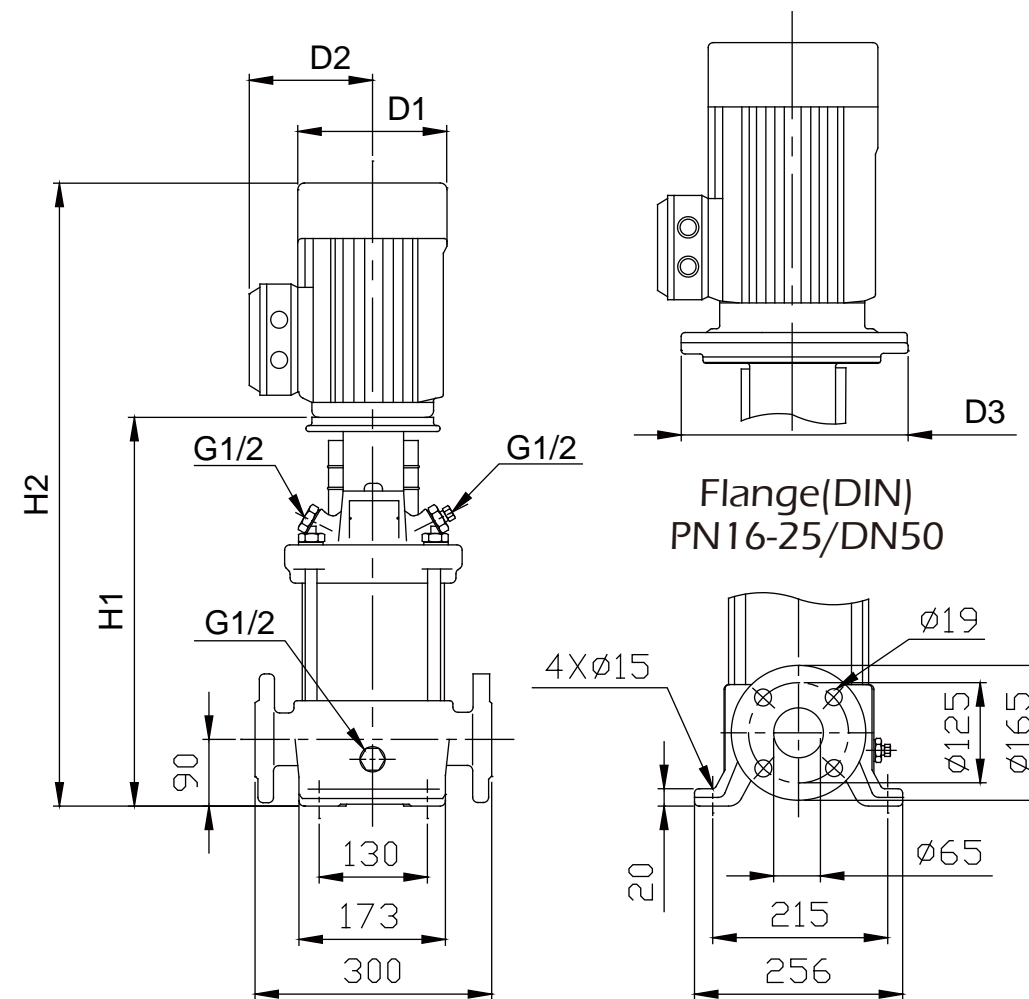
### Performance Curve



All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

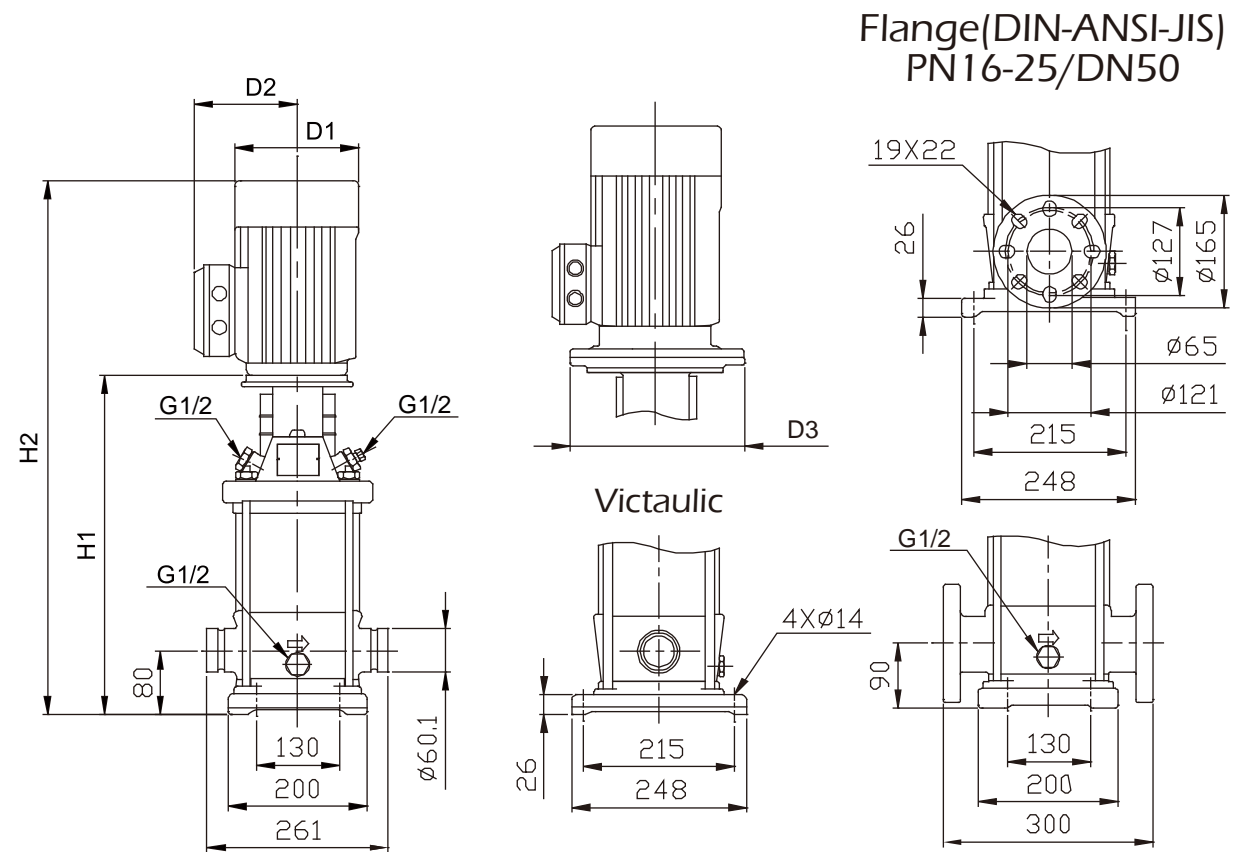
### Dimensions & Weights AVC-15M



Pump Type	Motor		Dimension (mm)					Net weight(kg)
	HP	P2 kw	DIN flange		D1	D2	D3	DIN flange
			H1	H2				
AVC-15M01	1.5	1.1	400	635	141	115	-	43.8
AVC-15M02	3	2.2	415	706	177	141	-	55.7
AVC-15M03	4	3	465	781	197	147	-	64.9
AVC-15M04	5.5	4	510	836	220	161	-	69.7
AVC-15M05	5.5	4	555	881	220	161	-	71.2
AVC-15M06	7.5	5.5	632	994	235	197	300	102.3
AVC-15M07	7.5	5.5	677	1039	235	197	300	103.8
AVC-15M08	10	7.5	722	1120	235	197	300	111.8
AVC-15M09	10	7.5	767	1165	235	197	300	113.3
AVC-15M10	15	11	889	1394	318	154	300	150.0
AVC-15M12	15	11	979	1484	318	154	300	153.0
AVC-15M14	15	11	1069	1574	318	154	300	156.3
AVC-15M17	20	15	1204	1714	318	154	300	171.5

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVI/S-15M



Flange(DIN-ANSI-JIS)  
PN16-25/DN50

Victaulic

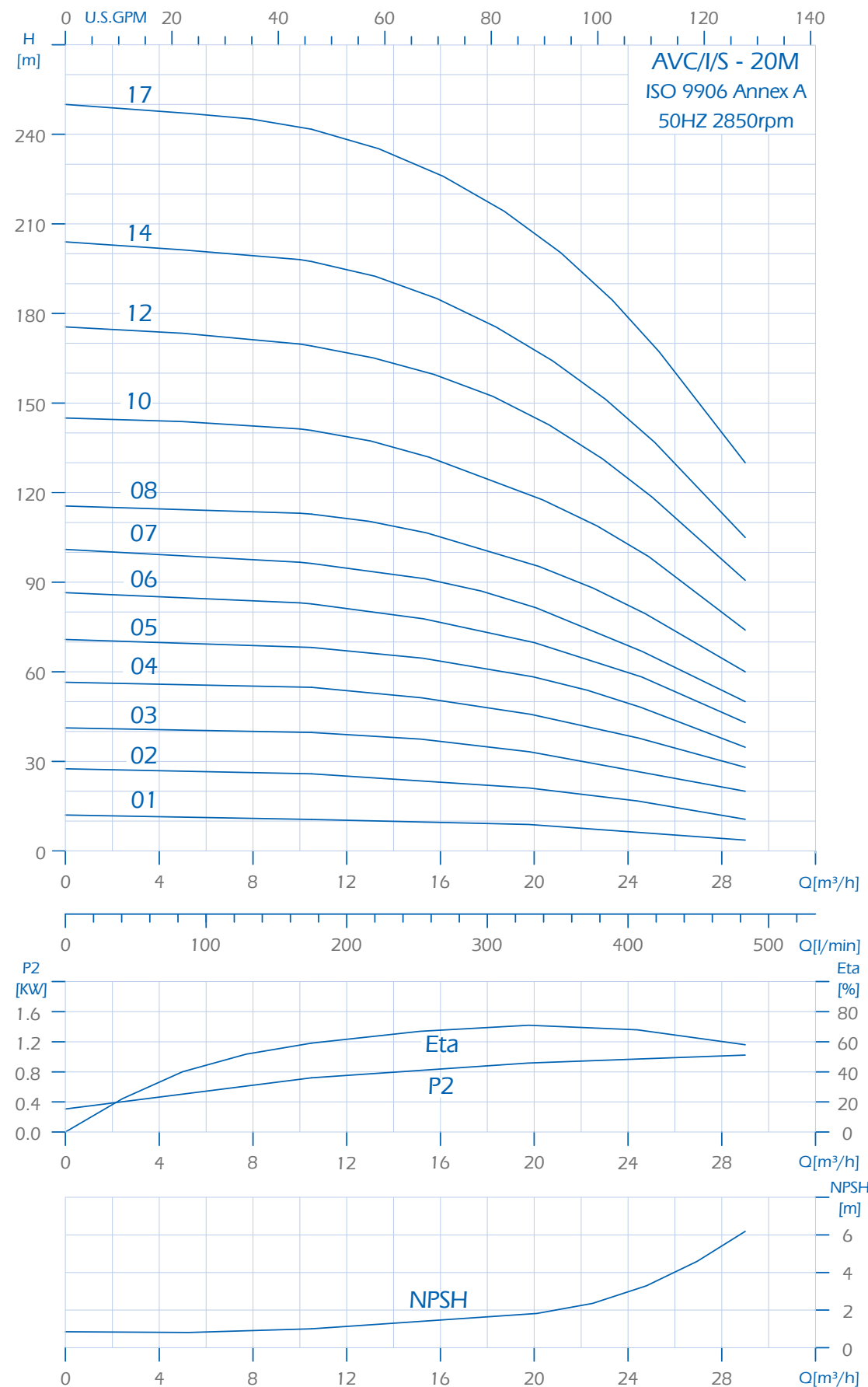
#### AVI/S-15M

Pump Type	Motor		Victaulic		Dimension (mm)					Net weight(kg)	
	HP	P2 kw	H1	H2	DIN flange		D1	D2	D3	Victaulic	DIN flange
AVI/AVS-15M01	1.5	1.1	387	622	397	632	141	115	-	36.0	36.6
AVI/AVS-15M02	3	2.2	403	694	413	704	177	141	-	47.7	48.3
AVI/AVS-15M03	4	3	453	769	463	779	197	147	-	56.1	56.7
AVI/AVS-15M04	5.5	4	498	824	508	834	220	161	-	61.0	61.6
AVI/AVS-15M05	5.5	4	543	869	553	879	220	161	-	62.4	63.0
AVI/AVS-15M06	7.5	5.5	620	982	630	992	235	197	300	94.6	95.3
AVI/AVS-15M07	7.5	5.5	665	1027	675	1037	235	197	300	96.1	96.7
AVI/AVS-15M08	10	7.5	710	1108	720	1118	235	197	300	104.1	104.7
AVI/AVS-15M09	10	7.5	755	1153	765	1163	235	197	300	105.6	106.2
AVI/AVS-15M10	15	11	877	1382	887	1392	318	154	350	142.7	143.3
AVI/AVS-15M12	15	11	967	1472	977	1482	318	154	350	145.5	146.2
AVI/AVS-15M14	15	11	1057	1562	1067	1572	318	154	350	148.5	149.1
AVI/AVS-15M17	20	15	1192	1702	1202	1712	318	154	350	162.9	163.5

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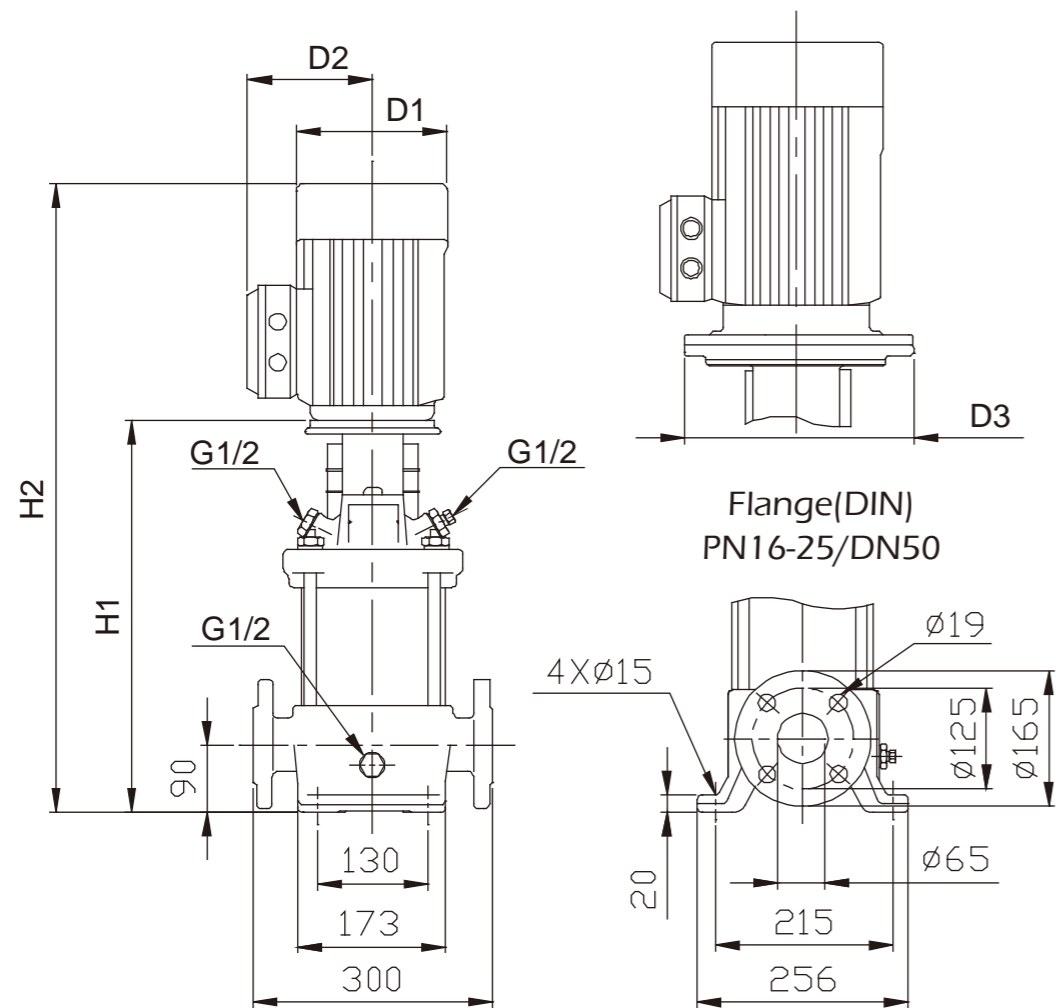
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Performance Curve



## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVC-20M

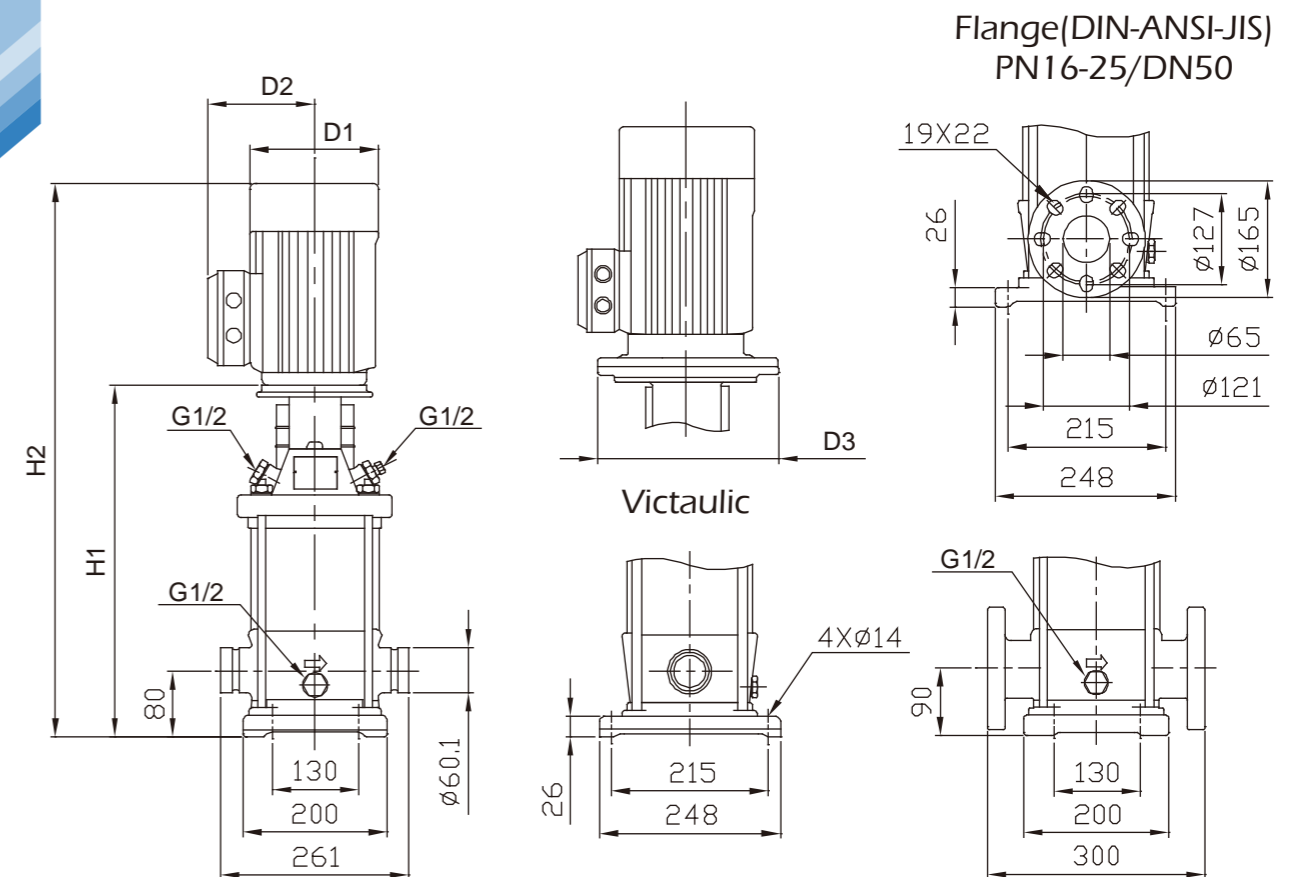


Pump Type	Motor		Dimension (mm)						Net weight(kg)
	P <sub>2</sub>		DIN flange		D1	D2	D3	DIN flange	
	HP	kw	H1	H2					
AVC-20M01	1.5	1.1	400	636	141	115	-	43.9	
AVC-20M02	3	2.2	415	708	177	141	-	55.7	
AVC-20M03	5.5	4	465	795	220	161	-	68.3	
AVC-20M04	7.5	5.5	542	910	235	197	300	99.4	
AVC-20M05	7.5	5.5	587	955	235	197	300	100.8	
AVC-20M06	10	7.5	632	1038	235	197	300	108.6	
AVC-20M07	10	7.5	677	1083	235	197	300	110.1	
AVC-20M08	15	11	799	1315	318	245	350	147.1	
AVC-20M10	15	11	889	1405	318	245	350	150.0	
AVC-20M12	20	15	979	1504	318	245	350	163.1	
AVC-20M14	20	15	1069	1594	318	245	350	166.0	
AVC-20M17	25	18.5	1204	1773	318	245	350	195.4	

All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

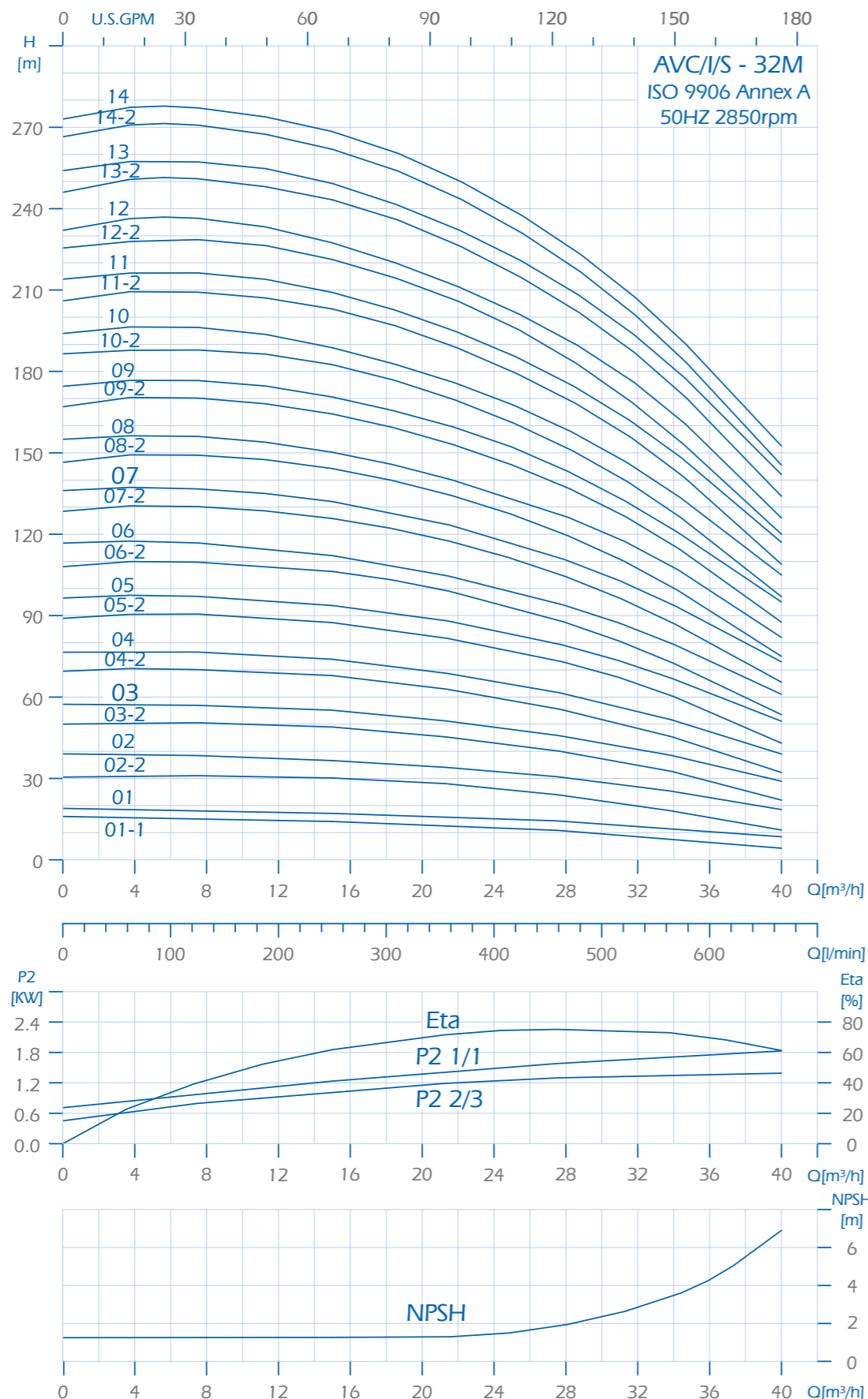
### Dimensions & Weights AVI/S-20M



Pump Type	Motor		Dimension (mm)							Net weight(kg)	
	P <sub>2</sub>		Victaulic		DIN flange			D3	Victaulic	DIN flange	
	HP	kw	H1	H2	H1	H2	D1				D2
AVI/AVS-20M01	1.5	1.1	387	623	397	632	141	115	-	36.0	36.6
AVI/AVS-20M02	3	2.2	403	696	413	704	177	141	-	47.7	48.3
AVI/AVS-20M03	5.5	4	453	783	463	789	220	161	-	59.5	60.2
AVI/AVS-20M04	7.5	5.5	530	898	540	902	235	197	300	91.7	92.3
AVI/AVS-20M05	7.5	5.5	575	943	585	947	235	197	300	93.2	93.8
AVI/AVS-20M06	10	7.5	620	1026	630	1028	235	197	300	100.9	101.6
AVI/AVS-20M07	10	7.5	665	1071	675	1073	235	197	300	102.4	103.0
AVI/AVS-20M08	15	11	787	1303	797	1302	318	245	350	139.7	140.3
AVI/AVS-20M10	15	11	877	1393	887	1392	318	245	350	142.7	143.3
AVI/AVS-20M12	20	15	967	1492	977	1487	318	245	350	155.7	156.3
AVI/AVS-20M14	20	15	1057	1582	1067	1577	318	245	350	158.6	159.2
AVI/AVS-20M17	25	18.5	1192	1761	1202	1752	318	245	350	187.8	188.5

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

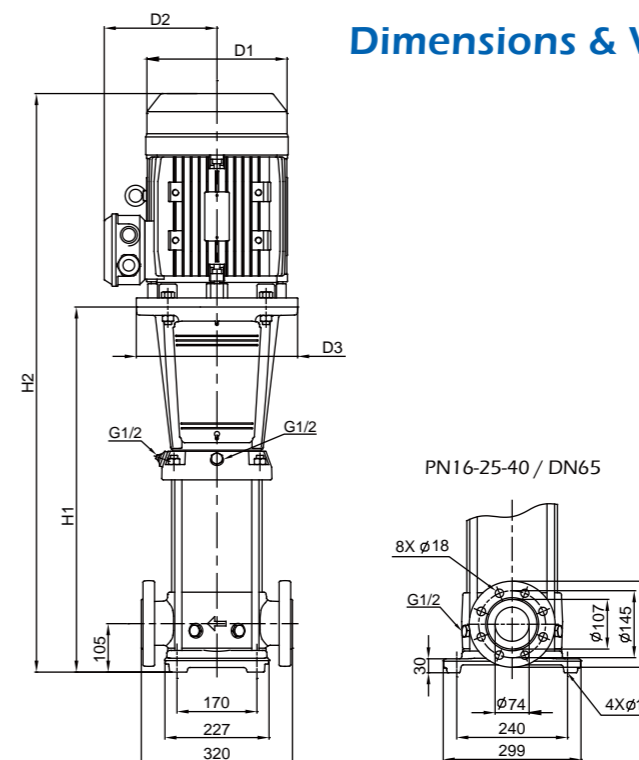
### Performance Curve



All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVC-32M

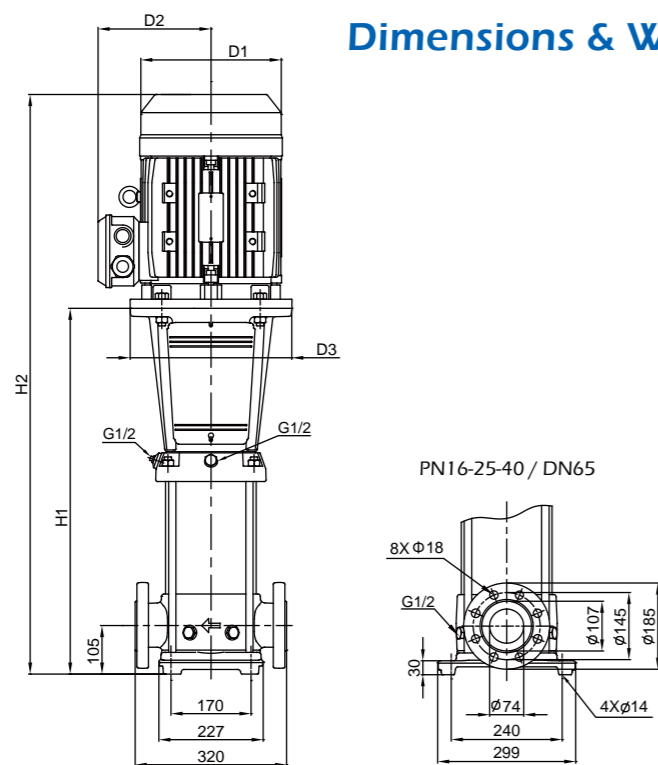


Pump Type	Motor		Dimension (mm)					Net weight(kg)
	HP	kw	DIN flange		D1	D2	D3	DIN flange
			H1	H2				
AVC-32M01-1	2	1.5	504	795	177	141	280	71.5
AVC-32M01	3	2.2	504	795	177	141	280	74.3
AVC-32M02-2	4	3	574	935	197	147	280	84.2
AVC-32M02	5.5	4	574	900	220	161	280	87.6
AVC-32M03-2	7.5	5.5	644	1006	235	197	300	110.2
AVC-32M03	7.5	5.5	644	1006	235	197	300	110.2
AVC-32M04-2	10	7.5	714	1112	235	197	300	119.5
AVC-32M04	10	7.5	714	1112	235	197	300	119.5
AVC-32M05-2	15	11	894	1399	318	245	350	163.3
AVC-32M05	15	11	894	1399	318	245	350	163.3
AVC-32M06-2	15	11	964	1469	318	245	350	166.3
AVC-32M06	15	11	964	1469	318	245	350	166.3
AVC-32M07-2	20	15	1034	1544	318	245	350	179.5
AVC-32M07	20	15	1034	1544	318	245	350	179.5
AVC-32M08-2	20	15	1104	1614	318	245	350	182.6
AVC-32M08	20	15	1104	1614	318	245	350	182.6
AVC-32M09-2	25	18.5	1174	1724	318	245	350	210.6
AVC-32M09	25	18.5	1174	1724	318	245	350	210.6
AVC-32M10-2	25	18.5	1244	1794	318	245	350	212.7
AVC-32M10	25	18.5	1244	1794	318	245	350	213.7
AVC-32M11-2	30	22	1314	1894	358	265	350	258.8
AVC-32M11	30	22	1314	1894	358	265	350	258.8
AVC-32M12-2	30	22	1384	1964	358	265	350	260.8
AVC-32M12	30	22	1384	1964	358	265	350	260.8
AVC-32M13-2	40	30	1454	2114	420	295	400	328.2
AVC-32M13	40	30	1454	2114	420	295	400	328.2
AVC-32M14-2	40	30	1524	2184	420	295	400	331.3
AVC-32M14	40	30	1524	2184	420	295	400	331.3



## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVI/S-32M

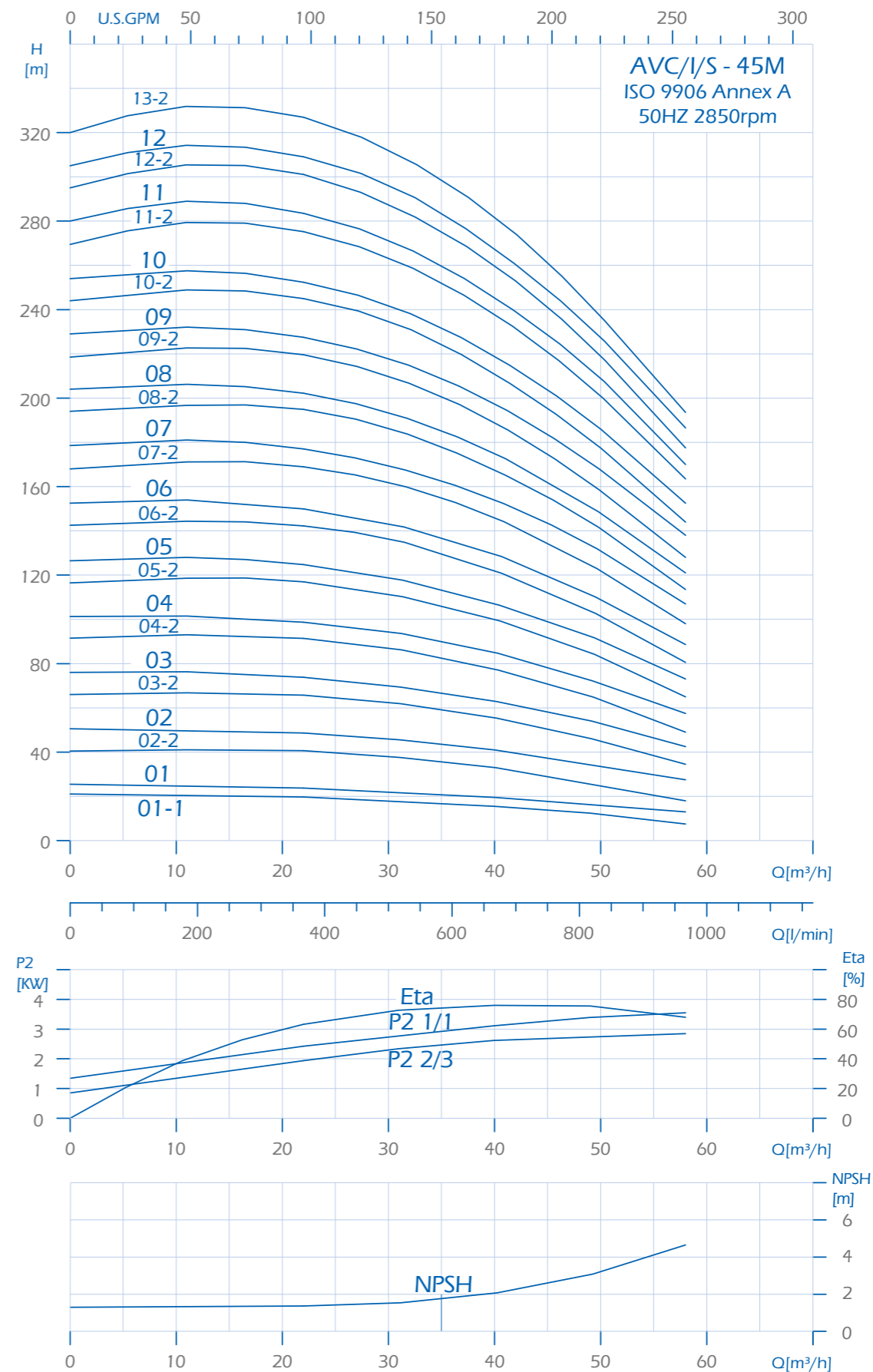


Pump Type	Motor		Dimension (mm)					Net weight(kg)
	P2		DIN flange					DIN
	HP	kw	H1	H2	D1	D2	D3	flange
AVI/S-32M01-1	2	1.5	504	795	177	141	280	66.5
AVI/S-32M01	3	2.2	504	795	177	141	280	69.3
AVI/S-32M02-2	4	3	574	935	197	147	280	79.1
AVI/S-32M02	5.5	4	574	900	220	161	280	82.5
AVI/S-32M03-2	7.5	5.5	644	1006	235	197	300	105.1
AVI/S-32M03	7.5	5.5	644	1006	235	197	300	105.1
AVI/S-32M04-2	10	7.5	714	1112	235	197	300	114.5
AVI/S-32M04	10	7.5	714	1112	235	197	300	114.6
AVI/S-32M05-2	15	11	894	1399	318	245	350	158.2
AVI/S-32M05	15	11	894	1399	318	245	350	158.3
AVI/S-32M06-2	15	11	964	1469	318	245	350	161.3
AVI/S-32M06	15	11	964	1469	318	245	350	161.4
AVI/S-32M07-2	20	15	1034	1544	318	245	350	174.6
AVI/S-32M07	20	15	1034	1544	318	245	350	174.6
AVI/S-32M08-2	20	15	1104	1614	318	245	350	177.9
AVI/S-32M08	20	15	1104	1614	318	245	350	177.9
AVI/S-32M09-2	25	18.5	1174	1724	318	245	350	205.5
AVI/S-32M09	25	18.5	1174	1724	318	245	350	205.6
AVI/S-32M10-2	25	18.5	1244	1794	318	245	350	208.1
AVI/S-32M10	25	18.5	1244	1794	318	245	350	208.2
AVI/S-32M11-2	30	22	1314	1894	358	265	350	253.6
AVI/S-32M11	30	22	1314	1894	358	265	350	253.6
AVI/S-32M12-2	30	22	1384	1964	358	265	350	256.3
AVI/S-32M12	30	22	1384	1964	358	265	350	256.3
AVI/S-32M13-2	40	30	1454	2114	420	295	400	323.6
AVI/S-32M13	40	30	1454	2114	420	295	400	323.6
AVI/S-32M14-2	40	30	1524	2184	420	295	400	326.3
AVI/S-32M14	40	30	1524	2184	420	295	400	326.3

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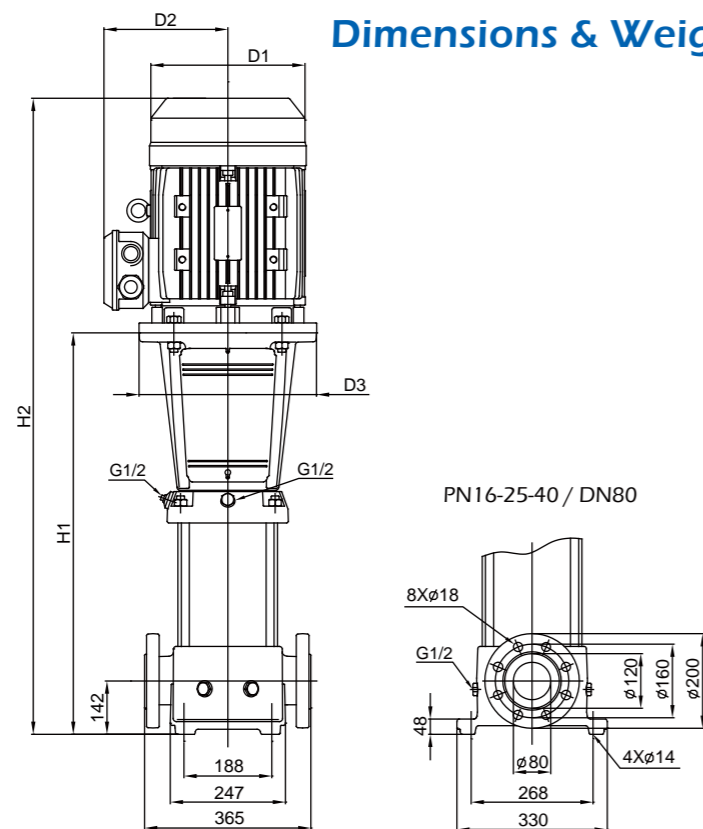
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Performance Curve



## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

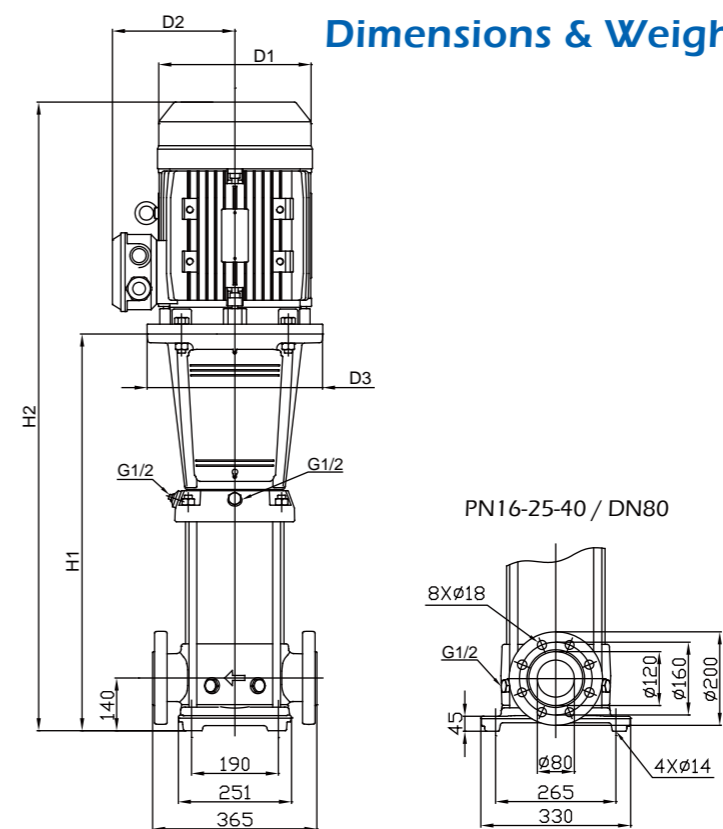
### Dimensions & Weights AVC-45M



Pump Type	Motor		DIN flange		Dimension (mm)			Net weight(kg)
	P2		H1	H2	D1	D2	D3	DIN flange
	HP	kw						
AVC-45M01-1	4	3	561	877	197	147	280	91.7
AVC-45M01	5.5	4	561	887	220	161	280	95.1
AVC-45M02-2	7.5	5.5	641	1003	235	197	300	118.3
AVC-45M02	10	7.5	641	1039	235	197	300	124.6
AVC-45M03-2	15	11	831	1336	318	245	350	169.0
AVC-45M03	15	11	831	1336	318	245	350	169.0
AVC-45M04-2	20	15	911	1421	318	245	350	182.9
AVC-45M04	20	15	911	1421	318	245	350	182.9
AVC-45M05-2	25	18.5	991	1541	318	245	350	211.6
AVC-45M05	25	18.5	991	1541	318	245	350	211.6
AVC-45M06-2	30	22	1071	1651	358	265	350	258.1
AVC-45M06	30	22	1071	1651	358	265	350	258.1
AVC-45M07-2	40	30	1151	1811	420	295	400	326.4
AVC-45M07	40	30	1151	1811	420	295	400	326.5
AVC-45M08-2	40	30	1231	1891	420	295	400	330.2
AVC-45M08	40	30	1231	1891	420	295	400	331.3
AVC-45M09-2	40	30	1311	1971	420	295	400	334.0
AVC-45M09	50	37	1311	1971	420	295	400	347.0
AVC-45M10-2	50	37	1391	2051	420	295	400	350.7
AVC-45M10	50	37	1391	2051	420	295	400	350.7
AVC-45M11-2	60	45	1471	2161	470	325	450	412.5
AVC-45M11	60	45	1471	2161	470	325	450	412.5
AVC-45M12-2	60	45	1551	2241	470	325	450	416.2
AVC-45M12	60	45	1551	2241	470	325	450	416.2
AVC-45M13-2	60	45	1631	2321	470	325	450	419.9

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVI/S-45M

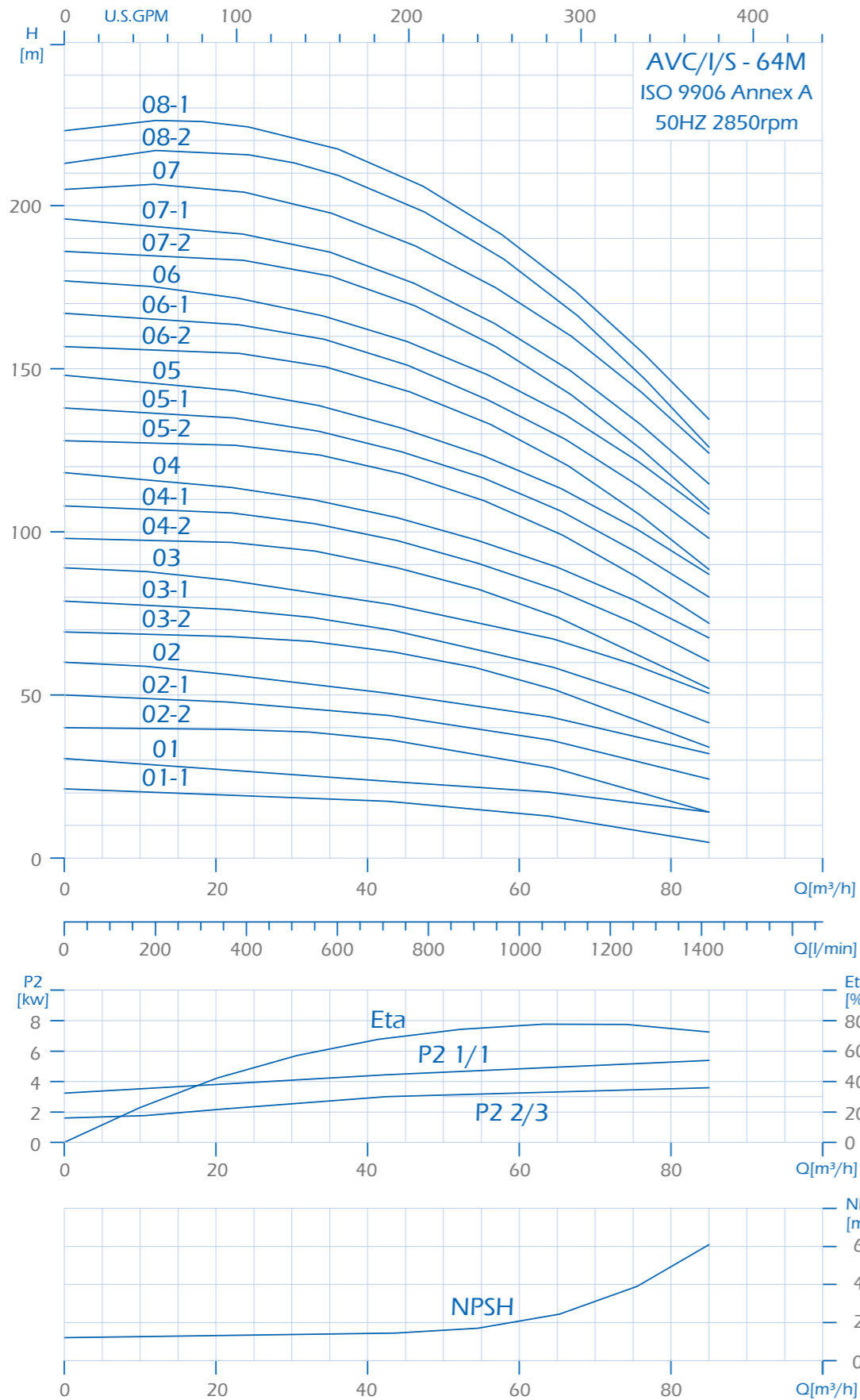


Pump Type	Motor		DIN flange		Dimension (mm)			Net weight(kg)
	P2		H1	H2	D1	D2	D3	DIN flange
	HP	kw						
AVI/S-45M01-1	4	3	559	875	197	147	280	82.9
AVI/S-45M01	5.5	4	559	885	220	161	280	86.3
AVI/S-45M02-2	7.5	5.5	639	1001	235	197	300	109.5
AVI/S-45M02	10	7.5	639	1037	235	197	300	115.8
AVI/S-45M03-2	15	11	829	1334	318	245	350	160.2
AVI/S-45M03	15	11	829	1334	318	245	350	160.2
AVI/S-45M04-2	20	15	909	1419	318	245	350	174.1
AVI/S-45M04	20	15	909	1419	318	245	350	174.1
AVI/S-45M05-2	25	18.5	989	1539	318	245	350	202.8
AVI/S-45M05	25	18.5	989	1539	318	245	350	202.8
AVI/S-45M06-2	30	22	1069	1649	358	265	350	249.3
AVI/S-45M06	30	22	1069	1649	358	265	350	249.3
AVI/S-45M07-2	40	30	1149	1809	420	295	400	317.7
AVI/S-45M07	40	30	1149	1809	420	295	400	317.7
AVI/S-45M08-2	40	30	1229	1889	420	295	400	321.4
AVI/S-45M08	40	30	1229	1889	420	295	400	321.5
AVI/S-45M09-2	40	30	1309	1969	420	295	400	325.2
AVI/S-45M09	50	37	1309	1969	420	295	400	338.2
AVI/S-45M10-2	50	37	1389	2049	420	295	400	341.9
AVI/S-45M10	50	37	1389	2049	420	295	400	341.9
AVI/S-45M11-2	60	45	1469	2159	470	325	450	403.7
AVI/S-45M11	60	45	1469	2159	470	325	450	403.7
AVI/S-45M12-2	60	45	1549	2239	470	325	450	407.4
AVI/S-45M12	60	45	1549	2239	470	325	450	407.4
AVI/S-45M13-2	60	45	1629	2319	470	325	450	411.1

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## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

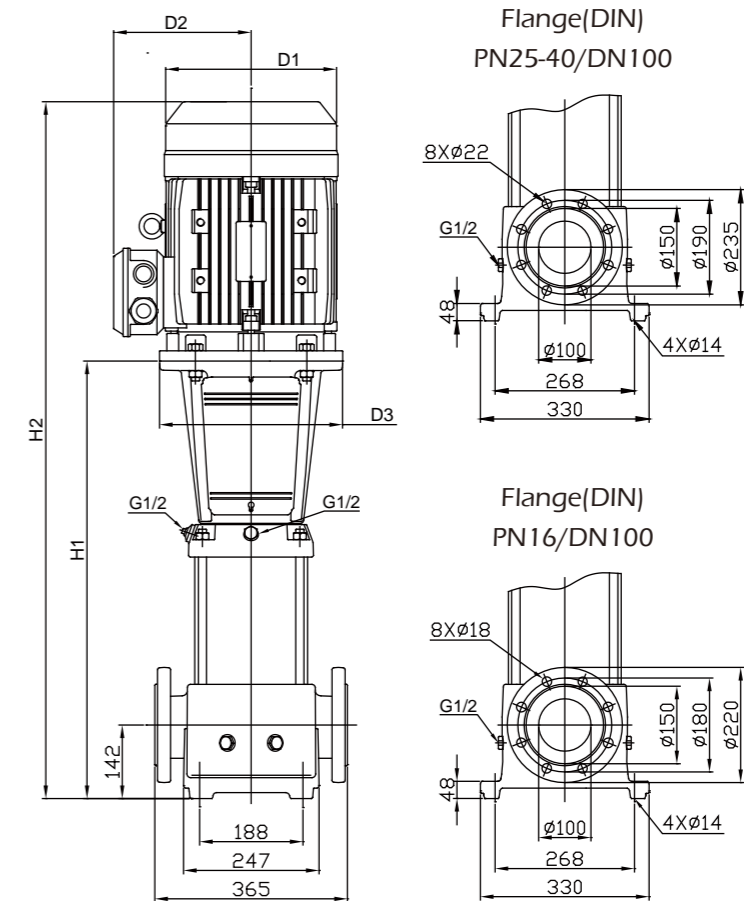
### Performance Curve



All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

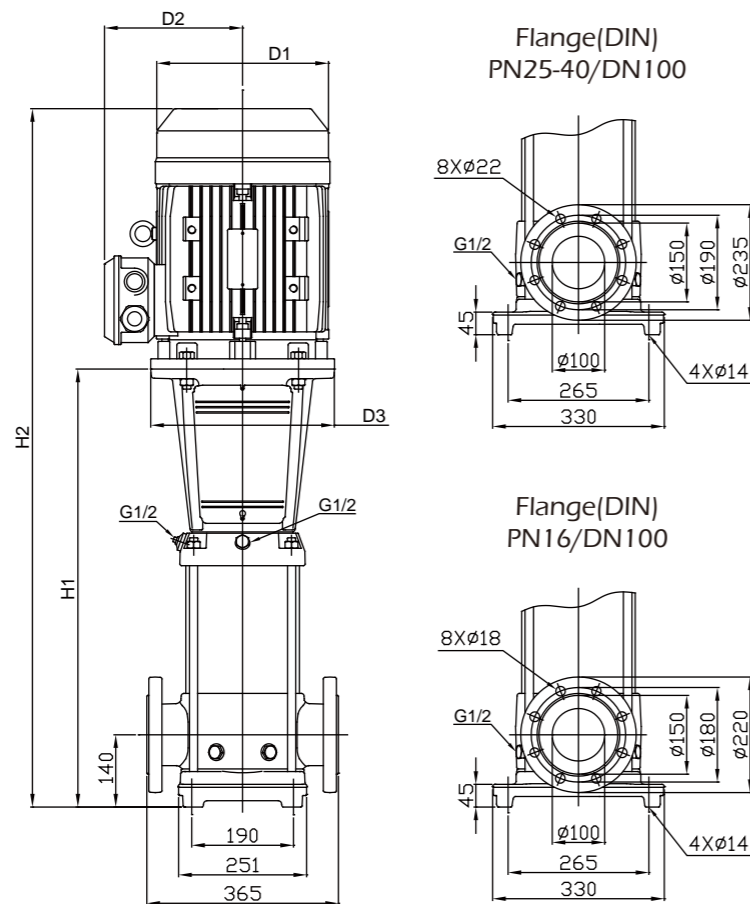
### Dimensions & Weights AVC-64M



Pump Type	Motor		Dimension (mm)						Net weight(kg)
	P2	P2	DIN flange		D1	D2	D3	DIN flange	
			H1	H2					
AVC-64M01-1	5.5	4	563	889	220	161	280	88.9	
AVC-64M01	7.5	5.5	563	613	235	197	300	108.3	
AVC-64M02-2	10	7.5	646	702	235	197	300	118.7	
AVC-64M02-1	15	11	756	1261	318	245	350	159.3	
AVC-64M02	15	11	756	1261	318	245	350	159.3	
AVC-64M03-2	20	15	838	1348	318	245	350	174.0	
AVC-64M03-1	20	15	838	1348	318	245	350	174.0	
AVC-64M03	25	18.5	838	1388	318	245	350	198.9	
AVC-64M04-2	25	18.5	921	1471	318	245	350	202.9	
AVC-64M04-1	30	22	921	1501	358	265	350	245.7	
AVC-64M04	30	22	921	1501	358	265	350	245.7	
AVC-64M05-2	40	30	1003	1663	420	295	400	314.3	
AVC-64M05-1	40	30	1003	1663	420	295	400	314.3	
AVC-64M05	40	30	1003	1663	420	295	400	314.3	
AVC-64M06-2	40	30	1086	1746	420	295	400	318.2	
AVC-64M06-1	50	37	1086	1746	420	295	400	331.2	
AVC-64M06	50	37	1086	1746	420	295	400	331.2	
AVC-64M07-2	50	37	1168	1828	420	295	400	335.3	
AVC-64M07-1	50	37	1168	1828	420	295	400	335.3	
AVC-64M07	60	45	1172	1862	470	325	450	393.4	
AVC-64M08-2	60	45	1255	1945	470	325	450	397.5	
AVC-64M08-1	60	45	1255	1945	470	325	450	397.5	

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVI/S-64M



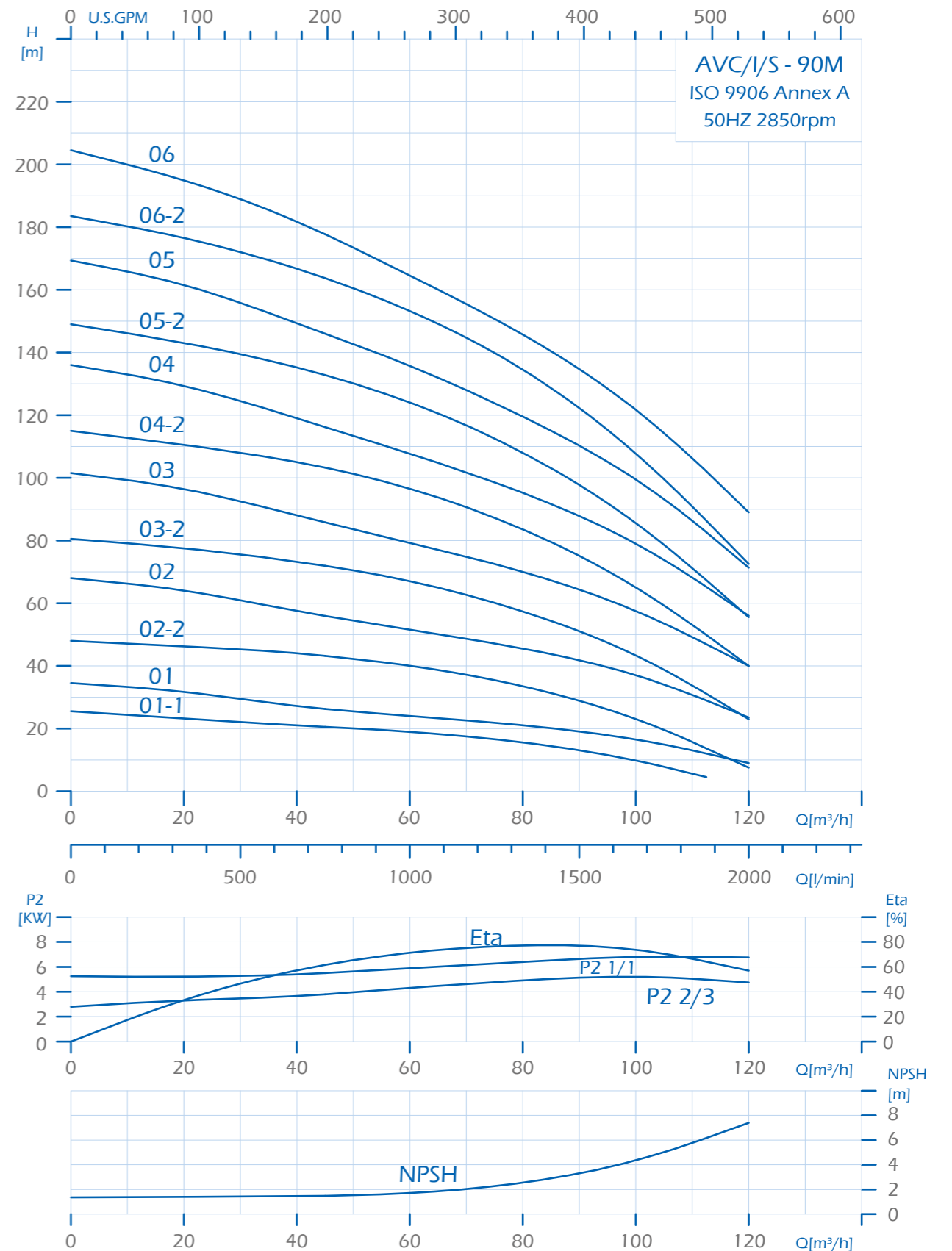
AVI/S-64M

Pump Type	Motor		DIN flange			Dimension (mm)			Net weight(kg)
	HP	P2 kw	H1	H2	D1	D2	D3		
AVI/S-64M01-1	5.5	4	563	889	220	161	280	81.8	
AVI/S-64M01	7.5	5.5	563	613	235	197	300	101.3	
AVI/S-64M02-2	10	7.5	646	702	235	197	300	111.7	
AVI/S-64M02-1	15	11	756	1261	318	245	350	152.3	
AVI/S-64M02	15	11	756	1261	318	245	350	152.3	
AVI/S-64M03-2	20	15	838	1348	318	245	350	166.5	
AVI/S-64M03-1	20	15	838	1348	318	245	350	166.5	
AVI/S-64M03	25	18.5	838	1388	318	245	350	191.4	
AVI/S-64M04-2	25	18.5	921	1471	318	245	350	195.4	
AVI/S-64M04-1	30	22	921	1501	358	265	350	238.1	
AVI/S-64M04	30	22	921	1501	358	265	350	238.1	
AVI/S-64M05-2	40	30	1003	1663	420	295	400	306.7	
AVI/S-64M05-1	40	30	1003	1663	420	295	400	306.7	
AVI/S-64M05	40	30	1003	1663	420	295	400	306.7	
AVI/S-64M06-2	40	30	1086	1746	420	295	400	310.7	
AVI/S-64M06-1	50	37	1086	1746	420	295	400	323.7	
AVI/S-64M06	50	37	1086	1746	420	295	400	323.7	
AVI/S-64M07-2	50	37	1168	1828	420	295	400	327.7	
AVI/S-64M07-1	50	37	1168	1828	420	295	400	327.7	
AVI/S-64M07	60	45	1172	1862	470	325	450	385.8	
AVI/S-64M08-2	60	45	1255	1945	470	325	450	390.0	
AVI/S-64M08-1	60	45	1255	1945	470	325	450	390.0	

All technical information is subject to change without notice.

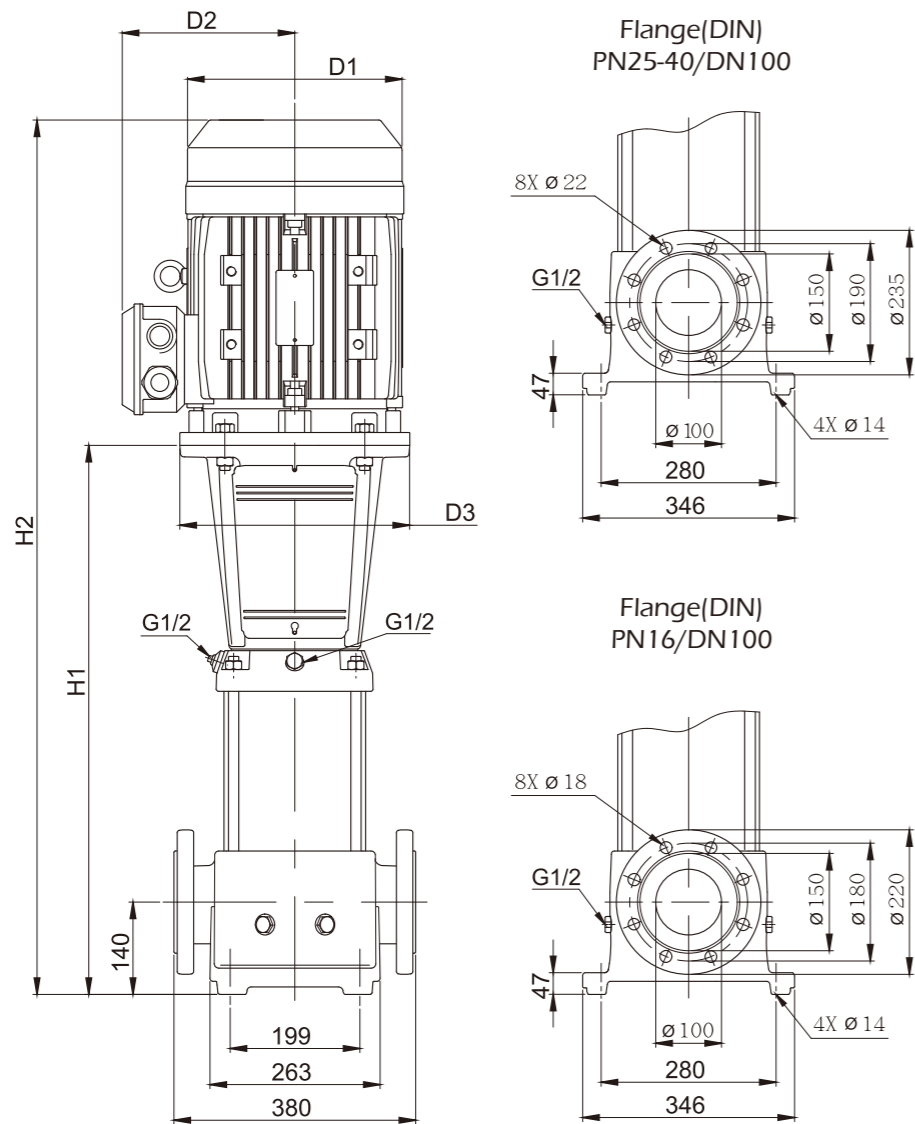
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Performance Curve



## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVC-90M

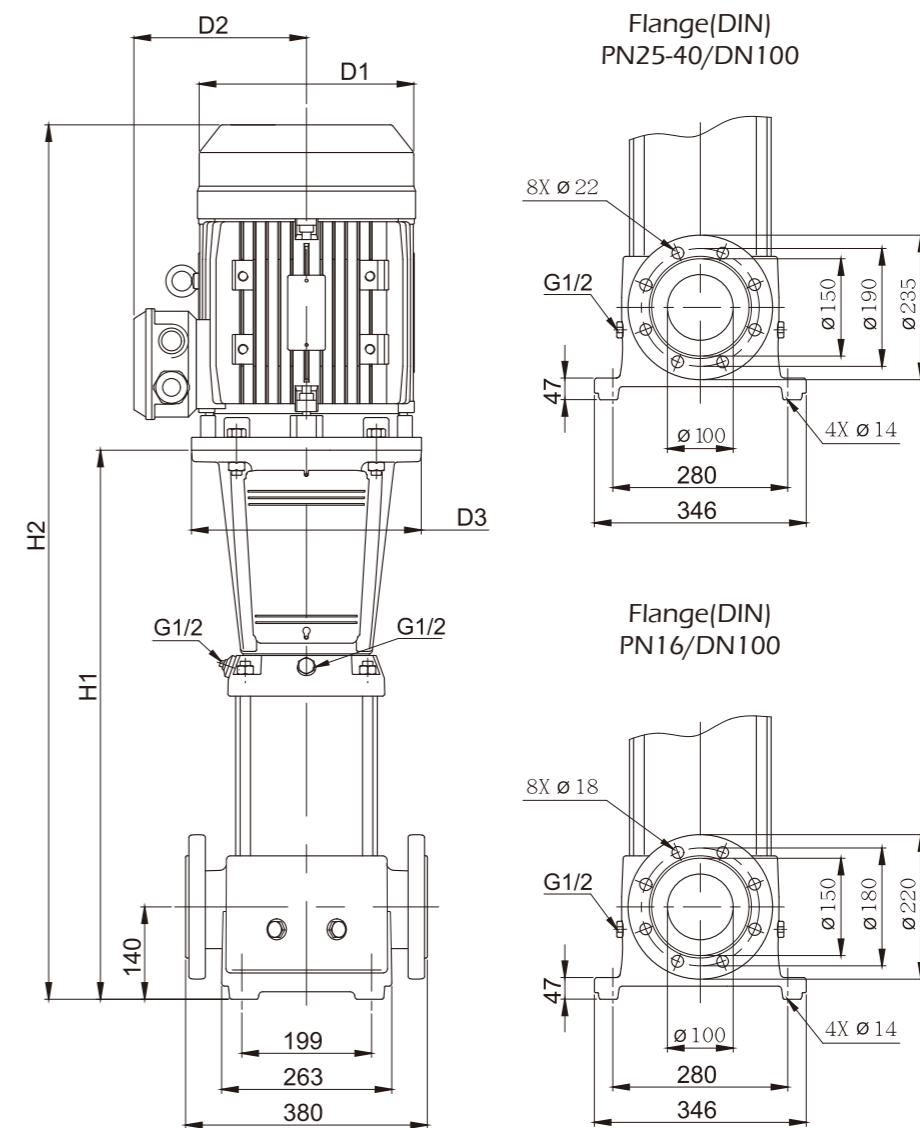


Pump Type	Motor P <sub>2</sub>		Dimension (mm)					Net weight(kg)
			DIN flange		D1	D2	D3	
			H1	H2				
AVC-90M01-1	7.5	5.5	572	934	235	197	300	122.2
AVC-90M01	10	7.5	572	970	235	197	300	128.5
AVC-90M02-2	15	11	774	1279	318	245	350	174.4
AVC-90M02	20	15	774	1284	318	245	350	184.5
AVC-90M03-2	25	18.5	866	1416	318	245	350	214.7
AVC-90M03	30	22	866	1446	358	265	350	257.5
AVC-90M04-2	40	30	958	1618	420	295	400	327.3
AVC-90M04	40	30	958	1618	420	295	400	327.3
AVC-90M05-2	50	37	1050	1710	420	295	400	346.9
AVC-90M05	50	37	1050	1710	420	295	400	346.9
AVC-90M06-2	60	45	1142	1832	470	325	450	410.2
AVC-90M06	60	45	1142	1832	470	325	450	410.3

All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

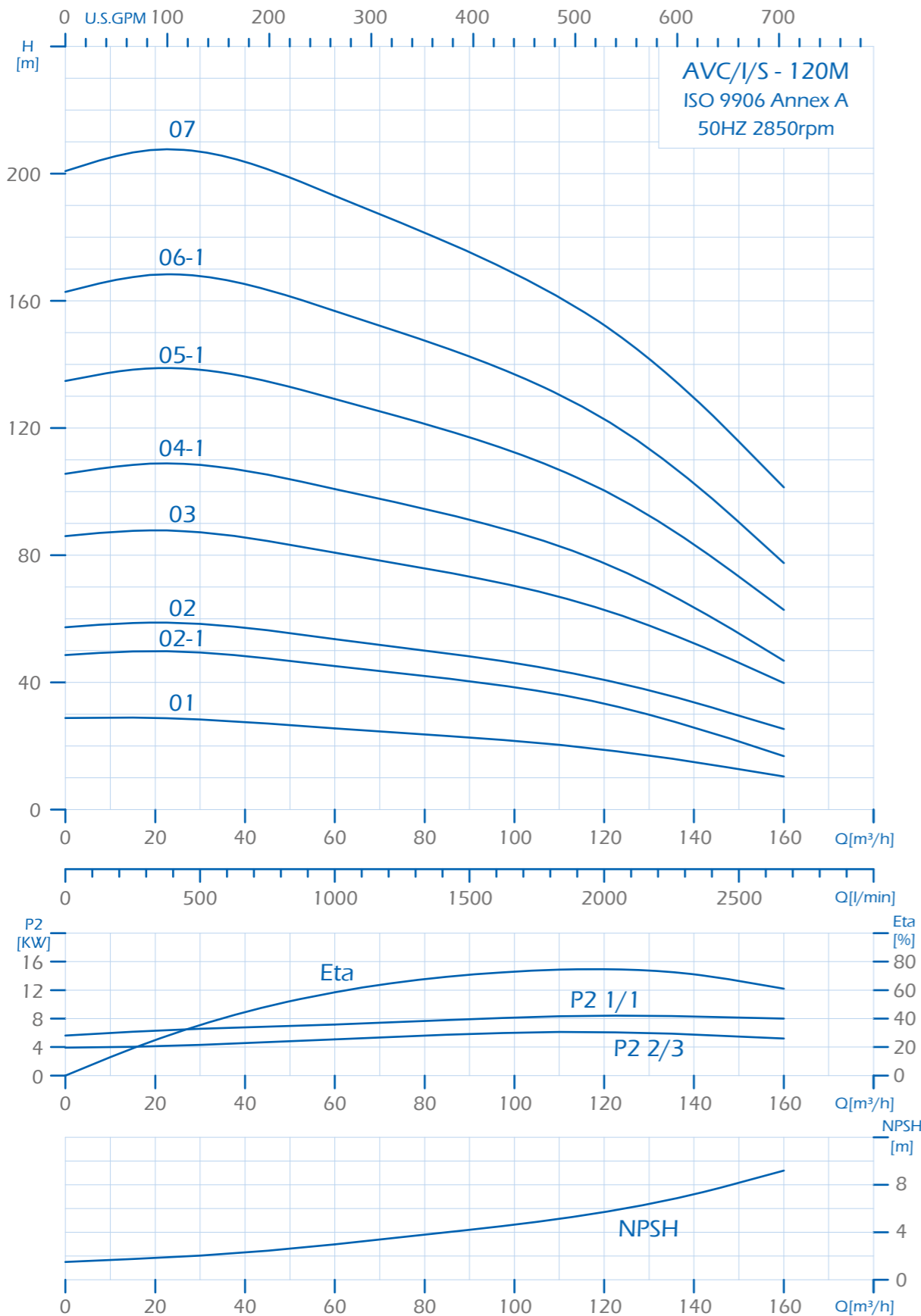
### Dimensions & Weights AVI/S-90M



Pump Type	Motor P <sub>2</sub>		Dimension (mm)					Net weight(kg)
			DIN flange		D1	D2	D3	
			H1	H2				
AVI/S-90M01-1	7.5	5.5	576	938	235	197	300	112.1
AVI/S-90M01	10	7.5	576	974	235	197	300	118.4
AVI/S-90M02-2	15	11	778	1283	318	245	350	164.2
AVI/S-90M02	20	15	778	1288	318	245	350	174.3
AVI/S-90M03-2	25	18.5	870	1420	318	245	350	204.4
AVI/S-90M03	30	22	870	1450	358	265	350	247.2
AVI/S-90M04-2	40	30	962	1622	420	295	400	316.9
AVI/S-90M04	40	30	962	1622	420	295	400	316.9
AVI/S-90M05-2	50	37	1054	1714	420	295	400	336.9
AVI/S-90M05	50	37	1054	1714	420	295	400	337.0
AVI/S-90M06-2	60	45	1146	1836	470	325	450	400.0
AVI/S-90M06	60	45	1146	1836	470	325	450	400.1

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

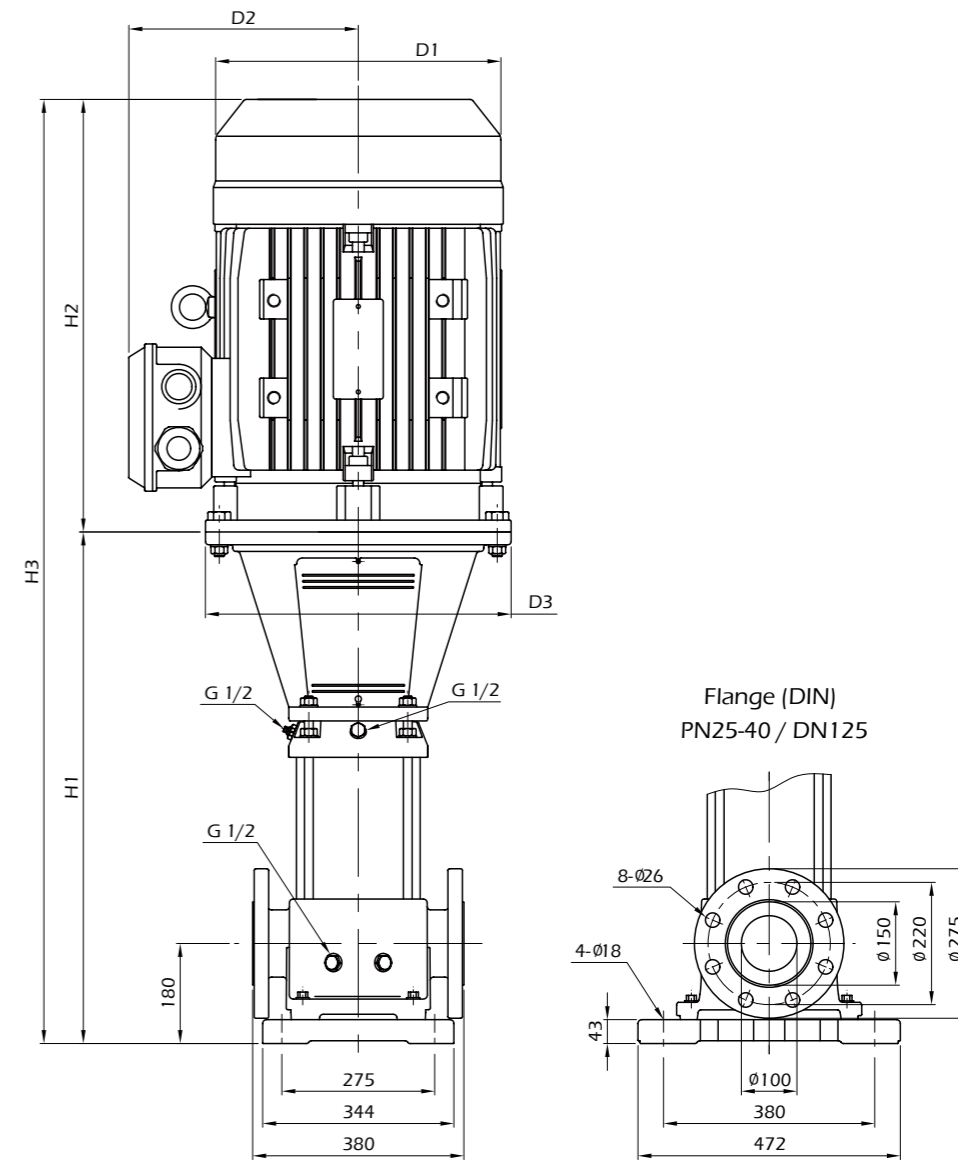
### Performance Curve



All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

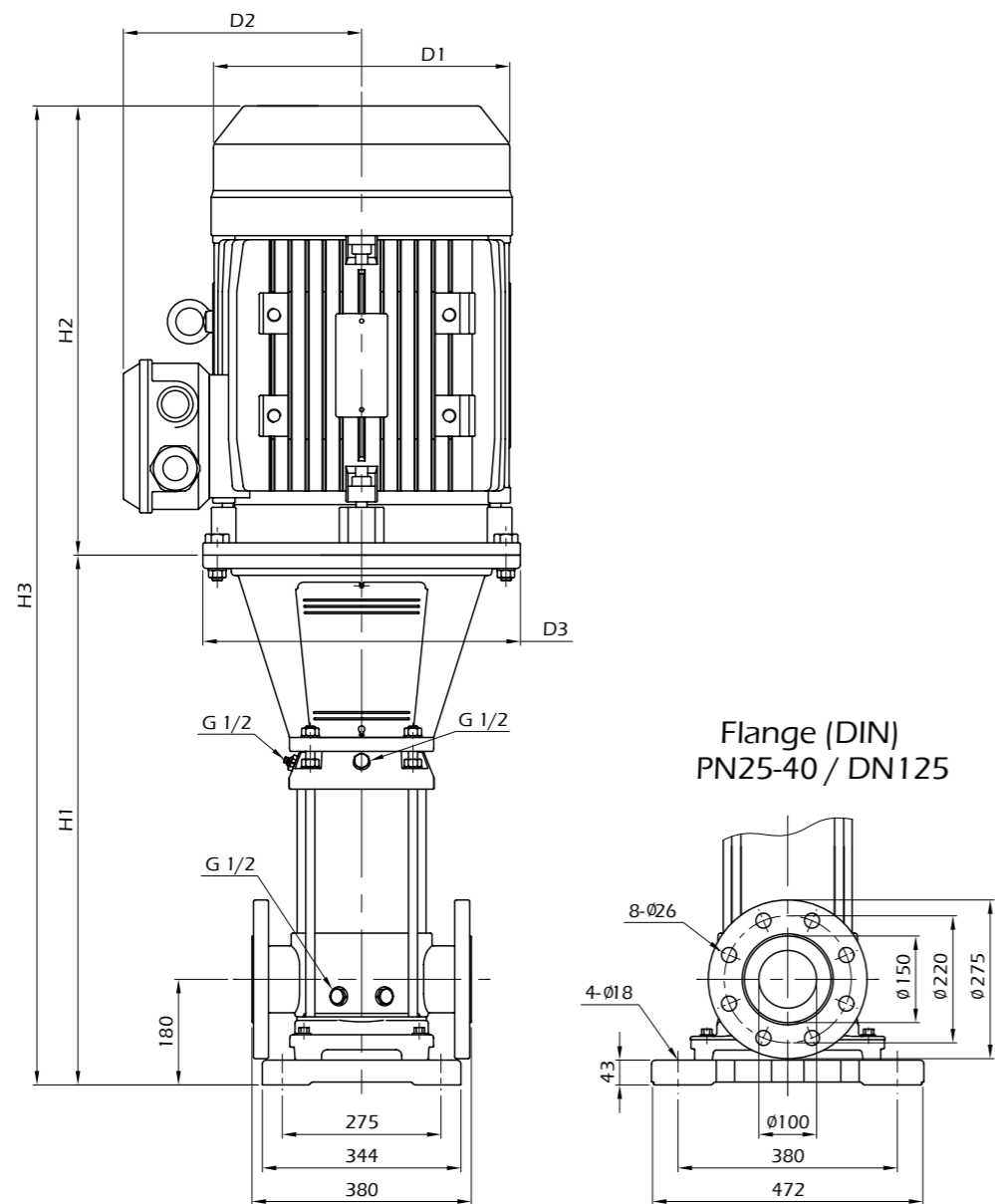
### Dimensions & Weights AVC-120M



Pump Type	Motor		Dimension (mm)						AVC-120M
	HP	P <sub>2</sub> kw	DIN flange			D1	D2	D3	Net weight(kg)
			H1	H2	H3				
AVC-120M01	15	11	834	505	1339	318	245	350	200.1
AVC-120M02-1	25	18.5	990	550	1540	318	245	350	245.1
AVC-120M02	30	22	990	580	1570	358	265	350	291.8
AVC-120M03	40	30	1145	660	1805	420	295	400	362.5
AVC-120M04-1	50	37	1301	660	1961	420	295	400	385.5
AVC-120M05-1	60	45	1460	690	2150	470	325	450	453.6
AVC-120M06-1	75	55	1642	770	2412	510	355	550	578.8
AVC-120M07	100	75	1797	845	2642	580	410	550	751.4

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVI/S-120M

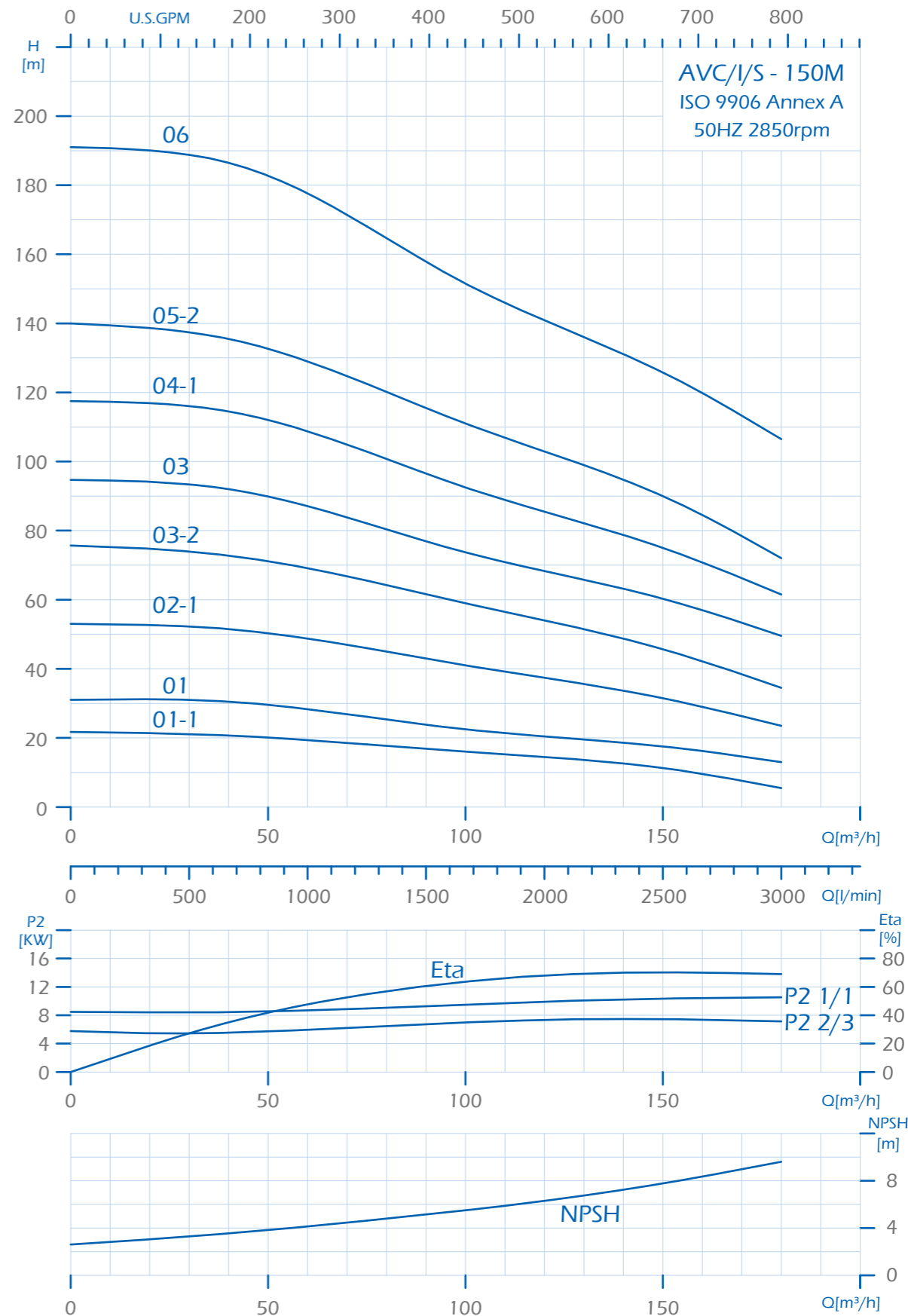


Pump Type	Motor		Dimension (mm)							Net weight(kg)
	HP	P <sub>2</sub> kw	DIN flange				D1	D2	D3	DIN flange
			H1	H2	H3	DIN flange				
AVI/S-120M01	15	11	837	505	1342	318	245	350	184.3	
AVI/S-120M02-1	25	18.5	993	550	1543	318	245	350	229.5	
AVI/S-120M02	30	22	993	580	1573	358	265	350	276.1	
AVI/S-120M03	40	30	1149	660	1809	420	295	400	346.9	
AVI/S-120M04-1	50	37	1304	660	1964	420	295	400	370.1	
AVI/S-120M05-1	60	45	1463	690	2153	470	325	450	438.3	
AVI/S-120M06-1	75	55	1645	770	2415	510	355	550	563.8	
AVI/S-120M07	100	75	1800	845	2645	580	410	550	736.5	

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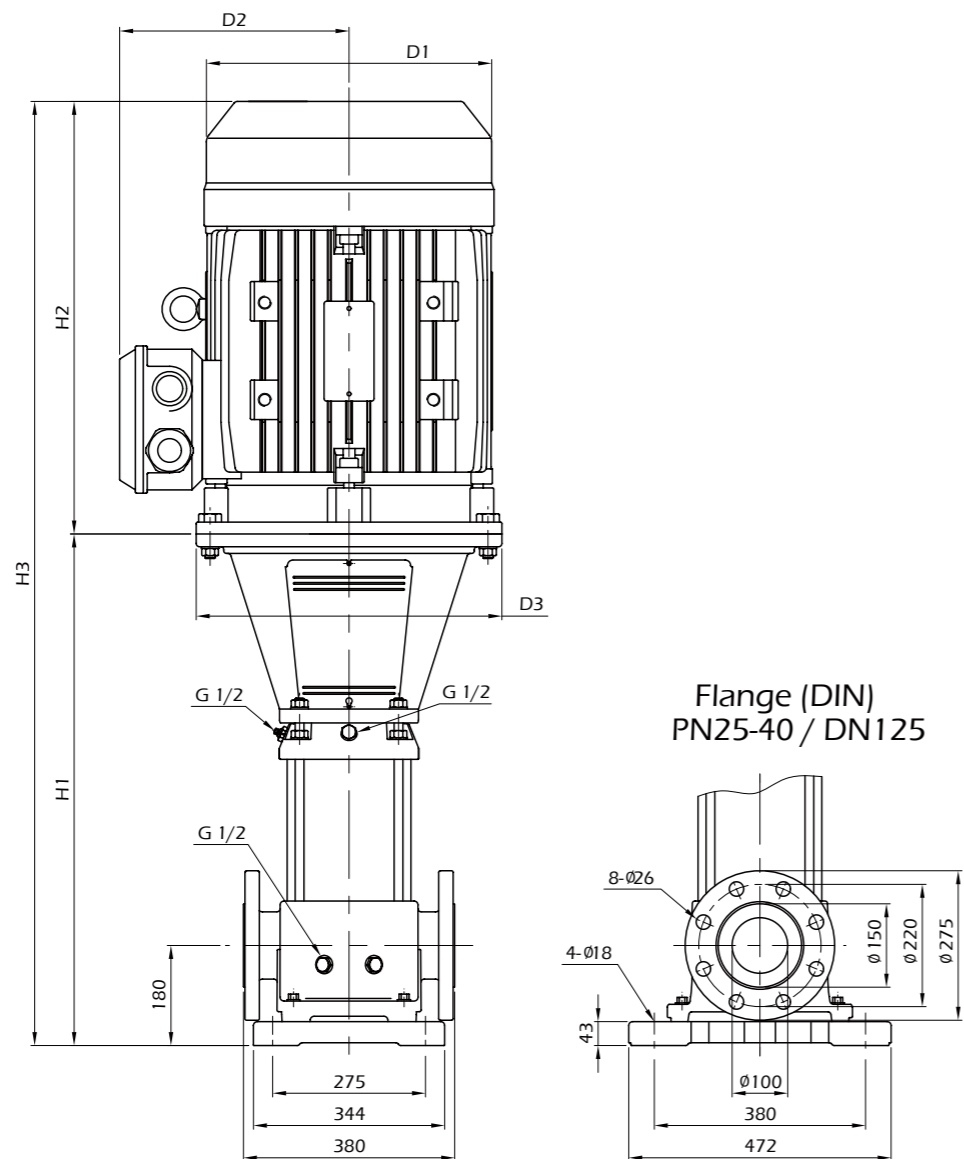
## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Performance Curve



## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVC-150M

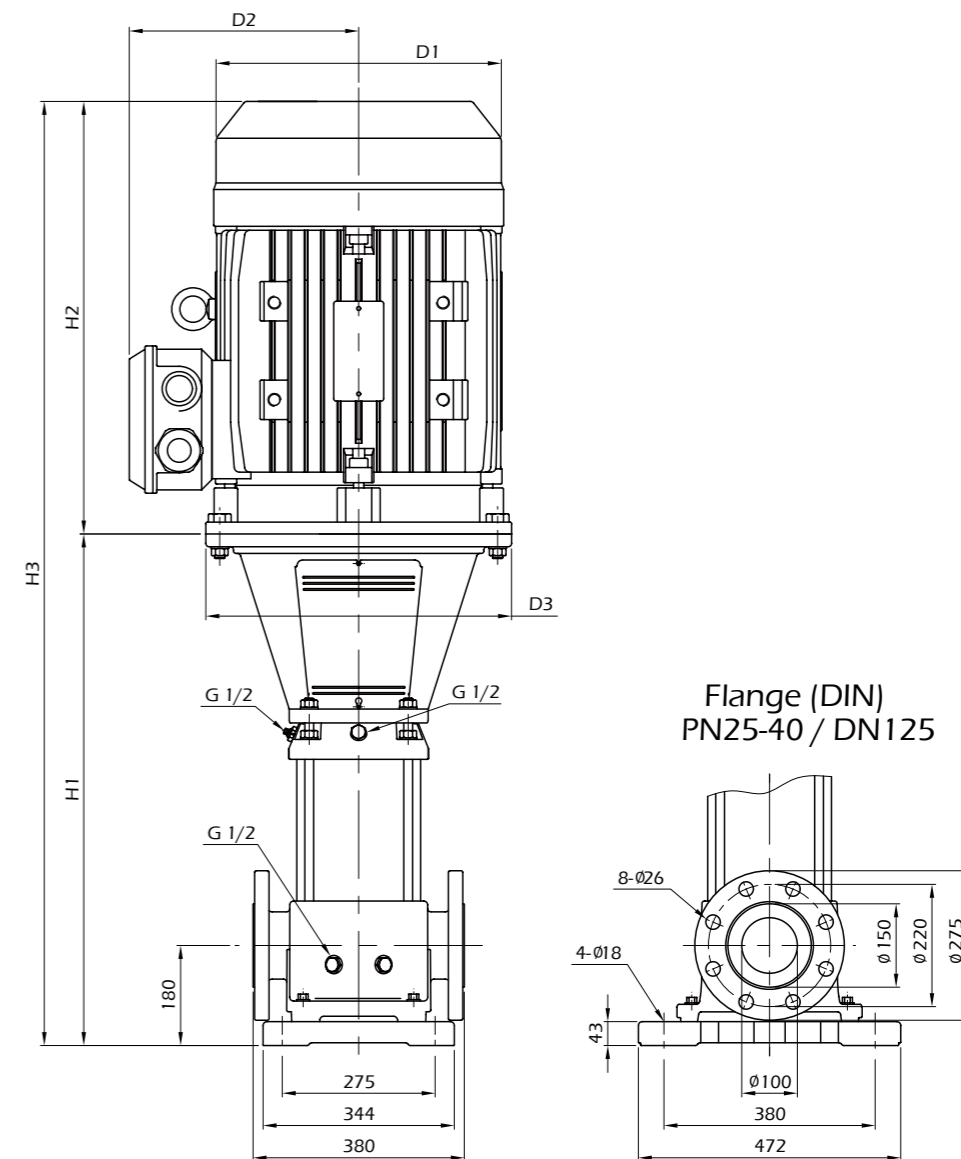


Pump Type	Motor		Dimension (mm)						Net weight(kg)
	HP	P <sub>2</sub> kw	DIN flange			D1	D2	D3	DIN flange
			H1	H2	H3				
AVC-150M01-1	15	11	834	505	1339	318	245	350	200.0
AVC-150M01	20	15	834	510	1344	318	245	350	210.1
AVC-150M02-1	30	22	990	580	1570	358	265	350	287.8
AVC-150M03-2	40	30	1145	660	1805	420	295	400	362.3
AVC-150M03	50	37	1145	660	1805	420	295	400	375.4
AVC-150M04-1	60	45	1305	690	1995	470	325	450	443.4
AVC-150M05-2	75	55	1486	770	2256	510	355	550	568.7
AVC-150M06	100	75	1642	845	2487	580	410	550	741.0

All technical information is subject to change without notice.

## AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

### Dimensions & Weights AVI/S-150M



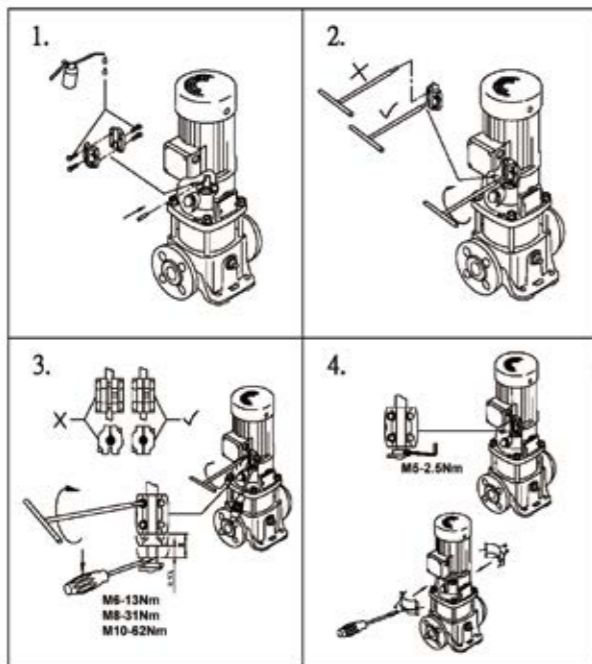
Pump Type	Motor		Dimension (mm)						Net weight(kg)
	HP	P <sub>2</sub> kw	DIN flange			D1	D2	D3	DIN flange
			H1	H2	H3				
AVI/S-150M01-1	15	11	837	505	1342	318	245	350	173.4
AVI/S-150M01	20	15	837	510	1347	318	245	350	183.5
AVI/S-150M02-1	30	22	993	580	1573	358	265	350	271.6
AVI/S-150M03-2	40	30	1148	660	1808	420	295	400	346.2
AVI/S-150M03	50	37	1148	660	1808	420	295	400	359.2
AVI/S-150M04-1	60	45	1308	690	1998	470	325	450	427.4
AVI/S-150M05-2	75	55	1489	770	2259	510	355	550	522.8
AVI/S-150M06	100	75	1645	845	2490	580	410	550	725.5



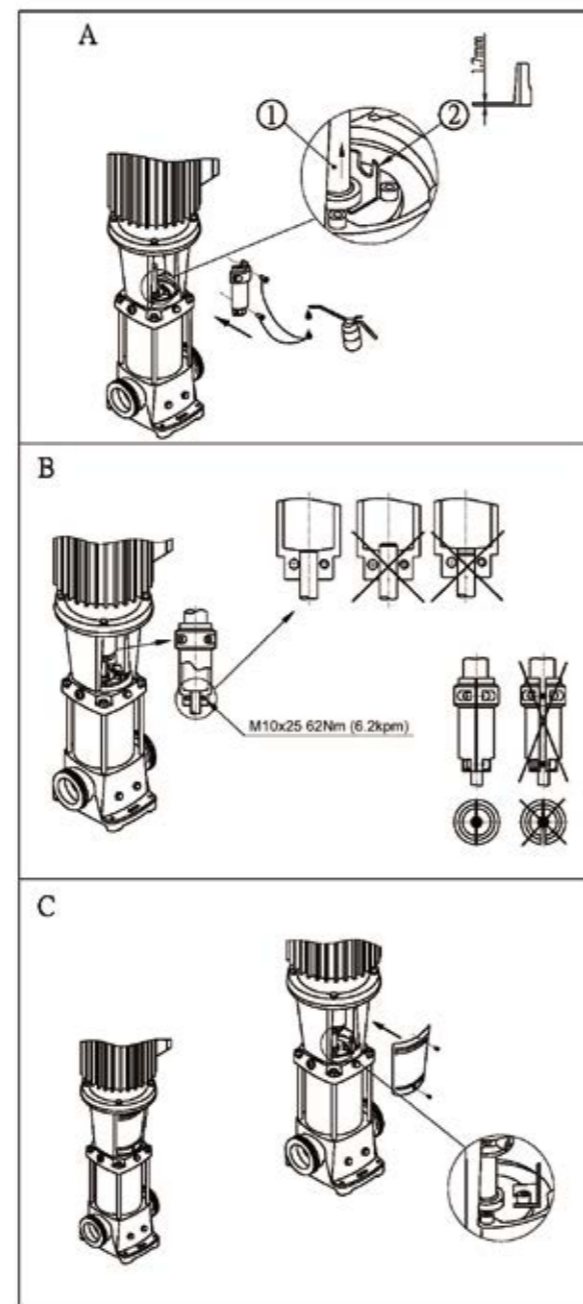
# AVC,AVI,AVS-Series 50HZ Vertical Multistage Centrifugal In-line Pumps

## Install Mechanical Seals

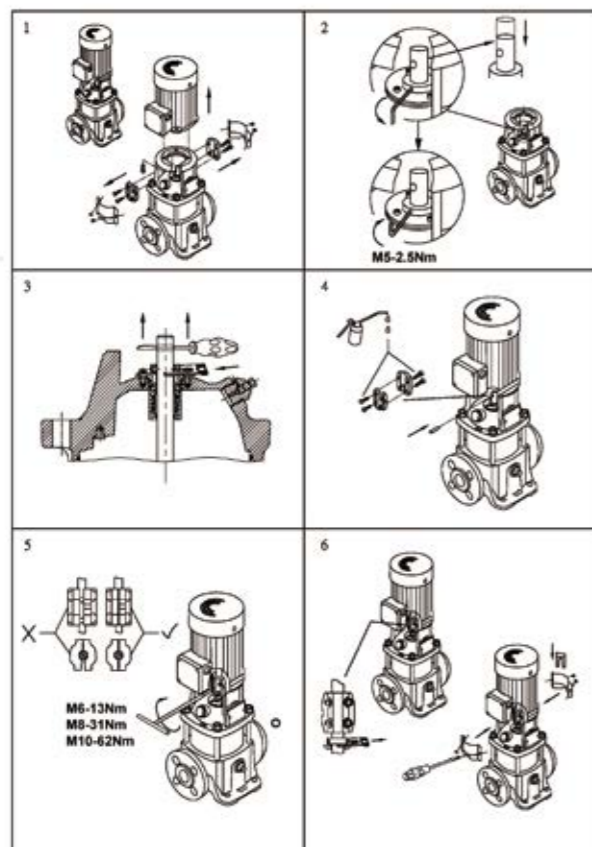
AVC/AVI/AVS 1M,3M,5M Coupling adjustment



AVC/AVI/AVS 32M,45M,64M,90M Coupling adjustment



AVC/AVI/AVS 10M,15M,20M Coupling adjustment

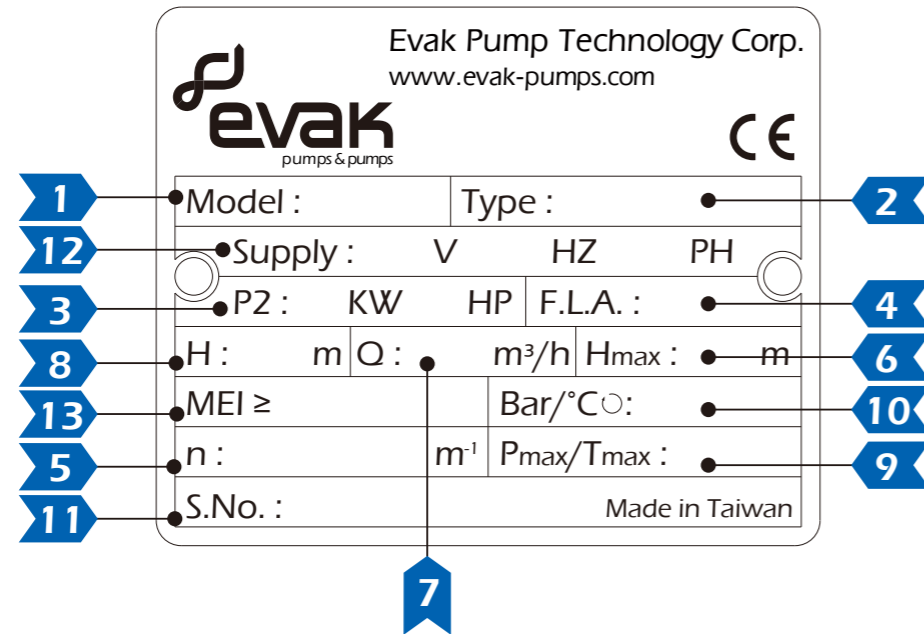


## Troubleshooting

Fault	Possible cause	Possible solution
1. Pump does not run when the motor starter is activated.	a. Supply failure or no power supply.	Check connections or restart the power supply.
	b. Main contacts in motor starter are not making contact or the motor coils are defective	Reconnect or replace contacts or magnetic coil.
	c. Pump or auxiliary circuits protection fuses blown.	Replace fuses.
	d. Pump or piping system may be obstructed causing a jam.	Clean the obstruction and restart pump.
	e. Motor may have failed.	Replace the motor.
	f. Motor protector or thermal relay has tripped out.	Reset the motor or thermal protector.
	g. Tripping of anti-dry running protection.	Check the water level in the tank or the water system pressure. If everything is in order, check the protection device and its connection cables.
2. Starter overload trips immediately when the power is switched on.	a. Overload setting is too low.	Set the motor starter correctly.
	b. The cable connection is loose or faulty.	Fasten or replace the cable connection.
	c. One fuse is blown.	Replace fuse and try starting again.
	d. Pump is jammed by an obstruction	Check and clean obstruction from system.
	e. Contacts in overload are faulty.	Replace motor starter contacts.
	f. The motor winding is defective.	Replace the motor.
	g. Low voltage (Especially at peak time).	Check the power supply.
3. The pump starts but, after a short time, the thermal protector trips out or the fuses blow.	a. The voltage is not within the motor's operating limits.	Check the operating conditions of the pump.
	b. The control panel is situated in an excessively heated area or is exposed to direct sunlight.	Protect the control panel from heat sources and from the sun.
	c. A phase in the power supply is missing.	Check the power supply.
4. The pump starts up but, after a period of time, the thermal protector trips out or the fuses blow.	a. Worn motor bearings causing motor to overheat.	Replace motor bearings.
	b. The pump's delivery rate is higher than the specified rate on the pump nameplate.	Partially close the on-off valve located discharge side until the delivery rate returns to within the specified limits.
	c. There are obstructions inside the pump or pumping system.	Disassemble and clean the pump and piping.
	d. Less viscous liquids may cause the motor to work too hard and overload the motor, causing the motor to overheat.	Check the actual power requirements based on the characteristics of the liquid being pumped, and replace the motor accordingly.
5. Pump runs but no water delivered.	a. Pump is not primed with liquid.	Fill the pump with the liquid to be pumped.
	b. The pump, suction or discharge pipes are blocked by solids in the liquid being pumped.	Clean the pump, suction or discharge pipe.
	c. The foot or check valve is blocked or has failed.	Replace the foot or check valve.
	d. The suction pipe leaks.	Repair or replace the suction pipe.
	e. The air is in the suction pipe or pump.	Remove trapped air from system.
	f. Motor operating in wrong direction (three-phase motor)	Change the direction of rotation of the motor by reversing motor connections.
6. The pump capacity is not constant.	a. The pump draws in air or the inlet pressure is too low.	Improve the suction conditions.
	b. The pump or the suction side of the piping system partly blocked by foreign bodies.	Clean the pump or suction pipe.
7. The system's general protection cuts in.	Short circuit.	Check electrical system.
8. The pump rotates in the wrong direction when switched off.	a. The foot or the check valve has failed.	Check and replace check valve.
	b. Leakage in the suction pipe.	Repair or replace the suction pipe.
9. The frequency of Pump start-up is too high.	a. Leakage in the foot valve, check valve or system.	Repair or replace the components.
	b. Ruptured membrane or no air pre-charge in surge tank.	See relevant instructions in surge tank's manual.
10. Vibration and noise	a. Cavitation	Reduce the required flow or improve the operating conditions of the pump (suction conditions, head, flow resistance, liquid temperature, viscosity ... etc.). Adjust the pump and/or motor shafts.
	b. Make sure that pump and motor shafts are properly aligned.	Replace the bearings or the motor.
	c. Worn motor bearings.	Consult a qualified engineer from the supplier of the frequency converter.
	d. Operation with frequency converter.	Replace vibration & noise dampers, if worn.
	e. Check vibration and noise damping devices	

**AVC,AVI,AVS-Series 50HZ  
Vertical Multistage Centrifugal  
In-line Pumps**

**Nameplate**



- 1.Pump Model
- 2.Pump Type
- 3.Rated Power
- 4.Eletric Current
- 5.Speed
- 6.Maximum Head
- 7.Rated Capacity
- 8.Rated Head
- 9.Maximum Operating Pressure
- 10.Rotating Direction
- 11.Serial Number
- 12.Voltage
- 13.Minimum Efficiency Index

**AVC,AVI,AVS-Series 50HZ  
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In-line Pumps**