

Apema

Tecnología de la bomba de agua



APE / CVF Series

**Vertical Multistage
Centrifugal Pumps**

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Vertical Multistage Centrifugal Pump

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Introduction

APE / CVF series are vertical multistage, in-line design with DIN flange or Victaulic coupling. All pumps are fitted with mechanical seals.

Pump

The APE / CVF series water pumps are non-self-priming, vertical multistage centrifugal pumps, in-line design with suction and discharge ports in the same horizontal plane, available in DIN Flange or Victaulic connection. APE is with stainless steel 304. CVF is with stainless steel 316. The pumps are suitable for transporting clean water without aggressive chemical without solid particles.

Operating Conditions

Liquid Temperature:	-15 °C to +110 °C
Maximum Ambient Temperature:	+40 °C
Flow Rate:	0.2 to 120 m³/hr
Head:	up to 330m

Electrical Motor

Motor Efficiency:	IEC, IE3
Electricity:	380/3/50
Insulation Class:	F
Protection Class:	IP55

Applications

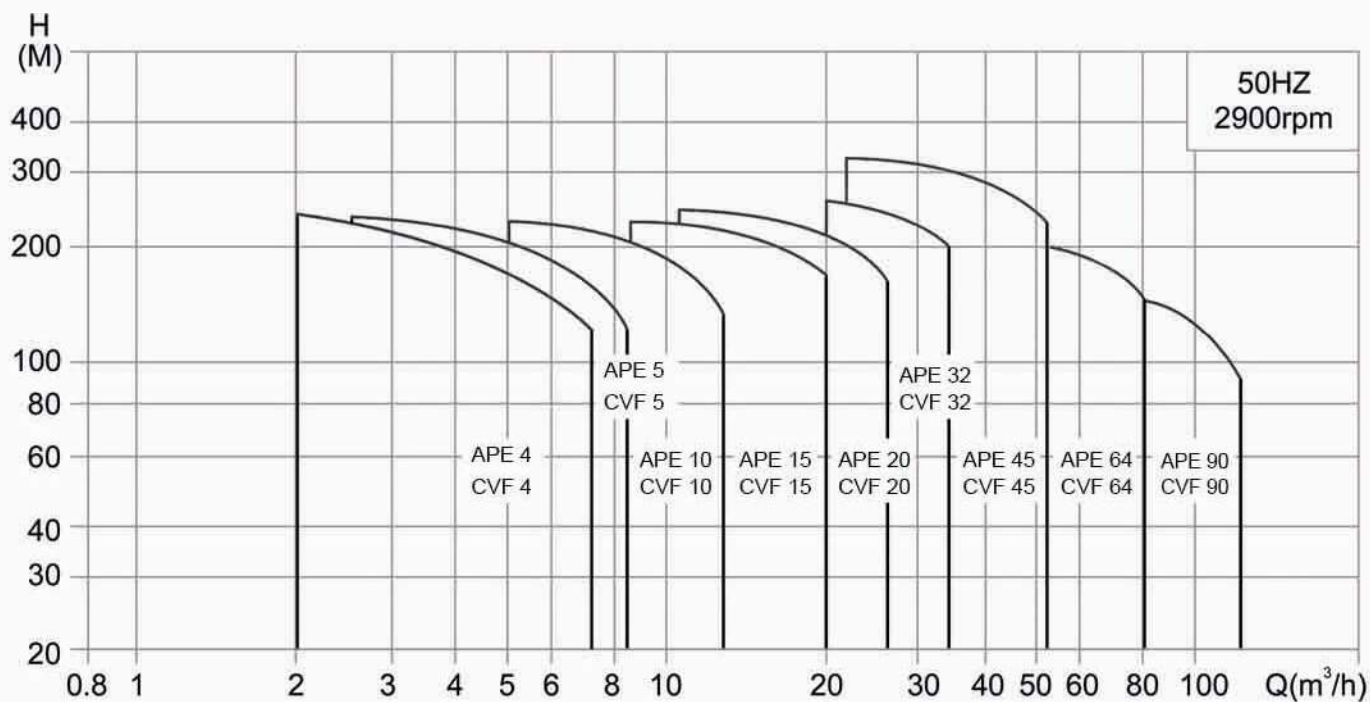
- *Water supply and pressure boosting for buildings, water stations, water supply network*
- *Irrigation and agriculture*
- *Washing and cleaning systems*
- *Fire fighting systems*
- *Process water systems*
- *Water treatment systems*
- *Heating, ventilation and air-conditioning*
- *RO water and desalination application*



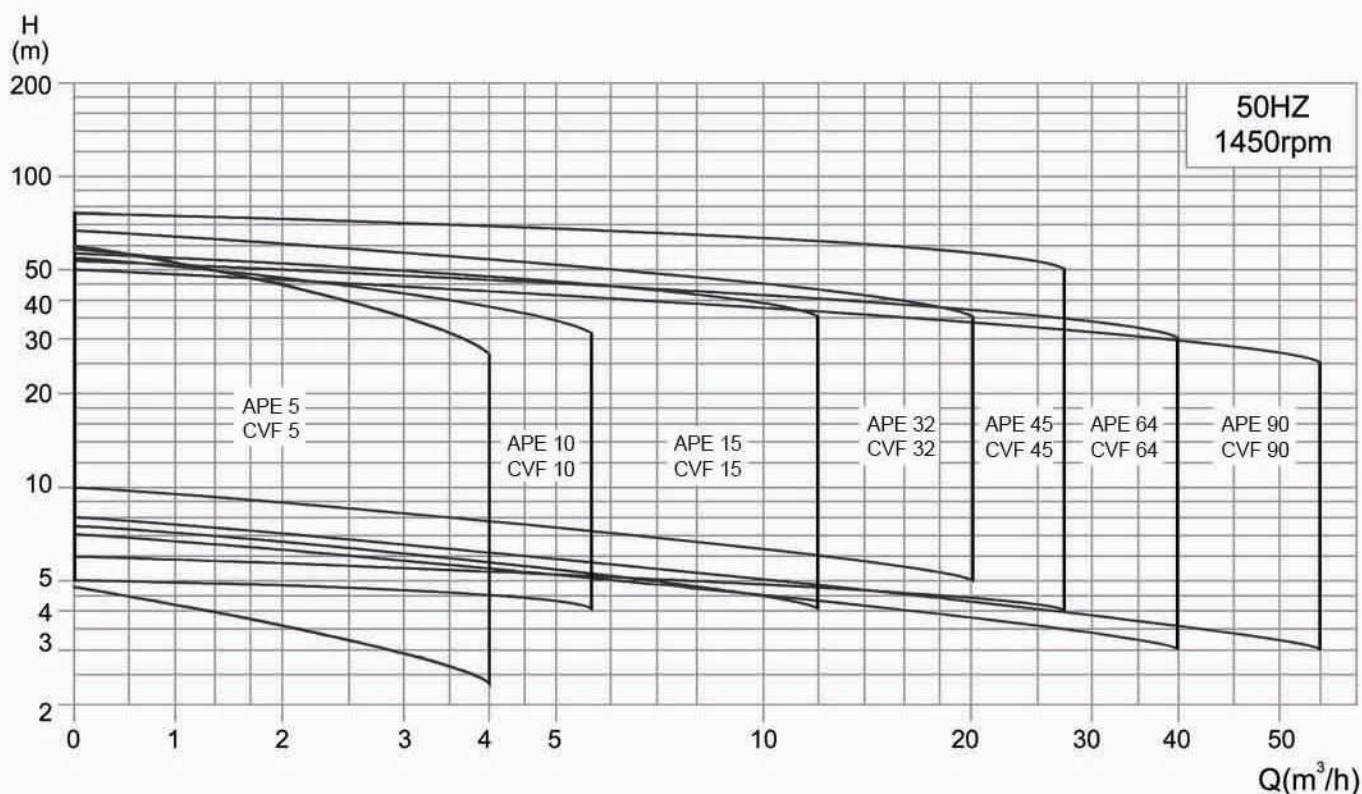
The use of mechanical seal made maintenance work easier.

Performance Range

Performance Range APE / CVF 2-pole 50Hz



Performance Range APE / CVF 4-pole 50Hz



General Characteristics

	2 poles								4 poles							
Range	4	5	10	15	20	32	45	64	5	10	15	32	45	64	90	
50Hz																
Nominal Flow [m ³ /h]	4	5	10	15	20	32	45	64	5	8	18	28	38	65	85	
Max. Flow Range [m ³ /h]	4.8	8.5	13	23.5	29	40	58	85	3.5	5.5	11	20	27	40	55	
Max. Pressure [bar]	25	24	22	23	25	28	26	20	15	16	16	16	16	16	16	
Fluid Temperature [°C]	-15 to +110															
Max. Power [kW]	4	5.5	7.5	15	18.5	30	45	45	1.1	1.1	2.2	4	7.5	5.5	5.5	
Version																
APE: Stainless Steel EN 1.4301 / AISI 304	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
CVF: Stainless Steel EN 1.4302 / AISI 316	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Motor																
Mains Connection 1~ [V/Hz] (Permissible voltage tolerance ± 10%)	0.37-2.2kW 220-240V 50Hz															
Mains Connection 3~ [V/Hz] (Permissible voltage tolerance ± 10%)	0.37-7.5kW 220-240/380-415V 50Hz From 11kW 380-415V 50Hz															
Insulation Class	F															
Enclosure Class	IP 55															
Ambient Temperature	40°C															
Motor Efficiency Class	IE3															
APE/CVF Pipe Connection																
Flange DN	DN 25/ DN 32	DN 25/ DN 32	DN 40	DN 50	DN 50	DN 65	DN 80	DN 100	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100	DN 100	
Victaulic-connections	R 1 ¼ DN 32	R 1 ¼ DN 32	R2 DN 50	R2 DN 50	R2 DN 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Mechanical Seals																
Tungsten carbide/ Silicon carbide/Viton/SUS316	Standard															
Seals																
EPDM	Standard															
Viton	Standard															

Electrical Data / Operating & Inlet Pressure

Electrical Data of Standard Motors

Motor Type						Nominal Current in [A]			
HP	KW	Pole	Flange	Frame		3~220V	3~240V	3~380V	3~415V
				4 Pole	2 Pole				
0.5	0.37	2/4	B14	712-4	711-2	1.7	2	1.1	1.3
0.75	0.55			713-4	712-2	2.5	2.8	1.5	1.7
1.0	0.75			802-4	80M1-2	3.5	3.9	2.1	2.3
1.5	1.1			90S-4	90M2-2	4.4	4.7	2.7	2.9
2.0	1.5			90L-4	90S-2	5.9	5.7	3.4	3.3
3.0	2.2			100L1-4	90L-2	8.5	8	4.9	4.6
4.0	3.0			100L2-4	100L-2	11.4	11.4	6.6	6.6
5.5	4.0			112M-4	112M-2	15.4	16.3	8.9	9.4
7.5	5.5			132S-4	132S1-2	20.8	20.8	12	12
10	7.5			132M-4	132S2-2	27.4	26.7	15.8	15.4
15	11		B5	--	160M1-2	--	--	21.2	20
20	15			--	160M2-2	--	--	27.7	25.5
25	18.5			--	160L-2	--	--	35.2	32.4
30	22			--	180M-2	--	--	41.3	38.2
40	30			--	180L-1	--	--	54.2	50.4
50	37			--	200L-2	--	--	70.8	65.6
60	45			--	225M-2	--	--	83.1	79.2

Operating & Inlet Pressure

	RPM	Stages	Maximum Operating Pressure	Stages	Maximum Inlet Pressure
APE / CVF 4	2900	2 - 36	16 - 25 bar	2 - 16	10 bar
				18 - 36	15 bar
APE / CVF 5		2 - 36	16 - 25 bar	2 - 16	10 bar
				18 - 36	15 bar
APE / CVF 10		1 - 22	16 - 25 bar	1 - 6	8 bar
				7 - 22	10 bar
APE / CVF 15		1 - 17	16 - 25 bar	1 - 3	8 bar
				4 - 17	10 bar
APE / CVF 20		1 - 17	16 - 25 bar	1 - 3	8 bar
				4 - 17	10 bar
APE / CVF 32		1 - 7	16 bar	1 - 4	4 bar
		8 - 12	25 bar	5 - 10	10 bar
		13 - 14	30 bar	11 - 14	15 bar
APE / CVF 45		1 - 5	16 bar	1 - 2	4 bar
		6 - 11	30 bar	3 - 5	10 bar
	12 - 13	33 bar	6 - 13	15 bar	
APE / CVF 64	1 - 5	16 bar	1 - 2	4 bar	
			2 - 4	10 bar	
	6 - 8	25 bar	4 - 8	15 bar	
APE / CVF 5	1450	2 - 36	24 bar	5 - 16	10 bar
APE / CVF 10		2 - 20	16 bar	2 - 20	4 bar
APE / CVF 15		2 - 16	16 bar	2 - 16	4 bar
APE / CVF 32		2 - 14	16 bar	2 - 14	4 bar
APE / CVF 45		1 - 13	16 bar	1 - 13	4 bar
APE / CVF 64		1 - 8	16 bar	1 - 8	4 bar
APE / CVF 90		1 - 6	16 bar	1 - 6	4 bar

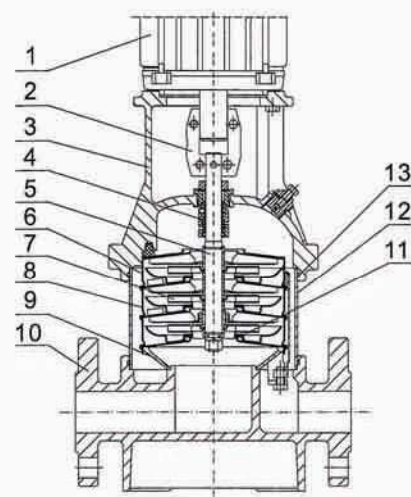
Construction

APE 4, 5, 10, 15, 20, 32, 45, 64, 90

Material APE

No.	Description	Material	EN/DIN	AISI/ASTM
1	Motor	--	--	--
2	Shaft Connector	--	--	--
3	Motor Support Frame	Cast Iron	EN-JL1030	ASTM25B
4	Mechanical Seal	Tungsten carbide/ Silicon carbide/ Viton/SUS316	--	--
5	Shaft	S.S.	1.4507	AISI1420
6	Outlet	S.S.	1.4301	AISI304
7	Impeller	S.S.	1.4301	AISI304
8	Hydraulic Stack	S.S.	1.4301	AISI304
9	Inlet	S.S.	1.4301	AISI304
10	Pump Body	Cast Iron	EN-JL1030	ASTM25B
11	Neck Ring	PTFE	--	--
12	Outer Sleeve	S.S.	1.4301	AISI304
13	O-ring	EPDM/FKM	--	--

Sectional Drawing APE

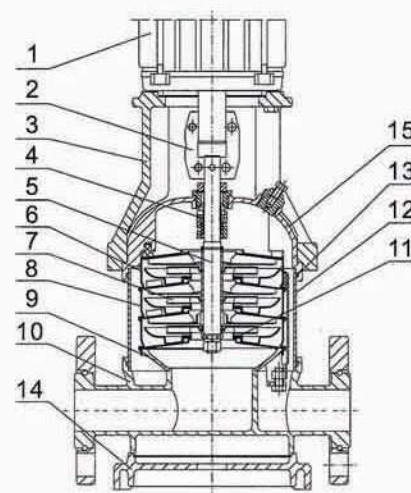


CVF 4, 5, 10, 15, 20, 32, 45, 64, 90

Material CVF

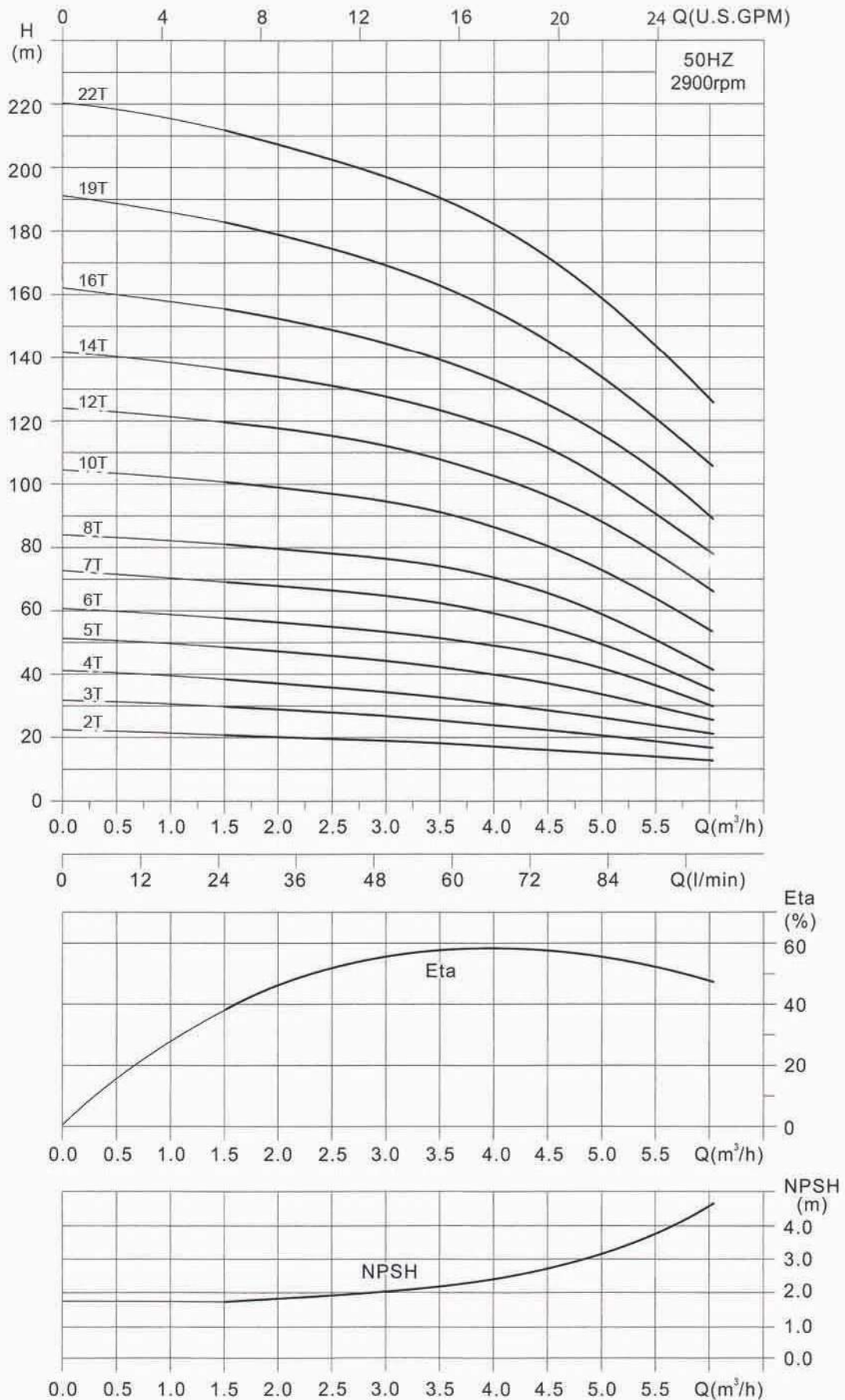
No.	Description	Material	EN/DIN	AISI/ASTM
1	Motor	--	--	--
2	Shaft Connector	--	--	--
3	Motor Support Frame	Cast Iron	EN-JL1030	ASTM25B
4	Mechanical Seal	Tungsten carbide/ Silicon carbide/ Viton/SUS316	--	--
5	Shaft	S.S.	1.4302	AISI316
6	Outlet	S.S.	1.4302	AISI316
7	Impeller	S.S.	1.4302	AISI316
8	Hydraulic Stack	S.S.	1.4302	AISI316
9	Inlet	S.S.	1.4302	AISI316
10	Pump Body	S.S.	1.4302	AISI316
11	Neck Ring	PTFE	--	--
12	Outer Sleeve	S.S.	1.4302	AISI316
13	O-ring	VITON	--	--
14	Bottom Base	Cast Iron	EN-JL1030	ASTM25B
15	Pump Cover	S.S.	1.4302	AISI316

Sectional Drawing CVF



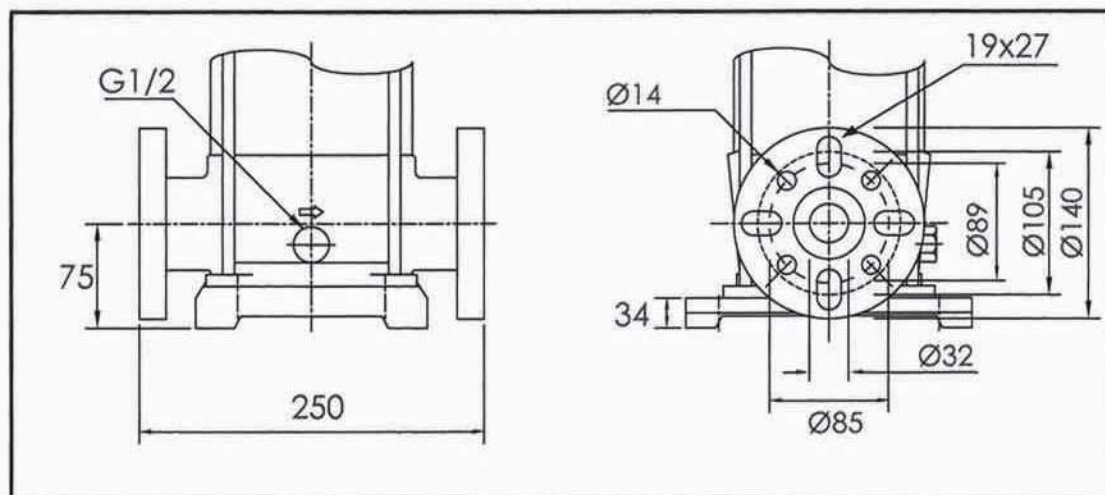
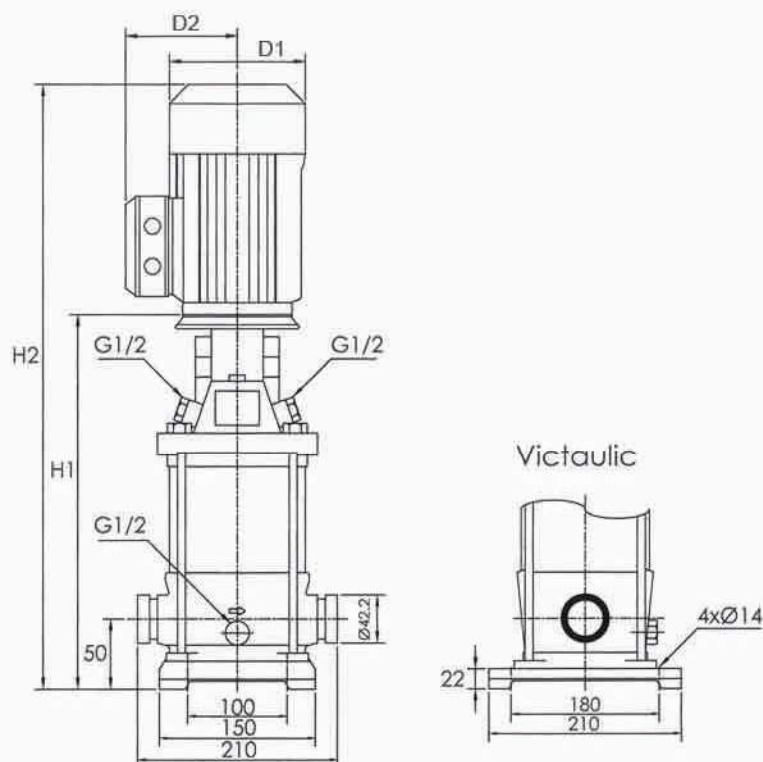
Performance Curve - 2900rpm

APE, CVF 4



Dimensions and Weights - 2900rpm

APE, CVF 4

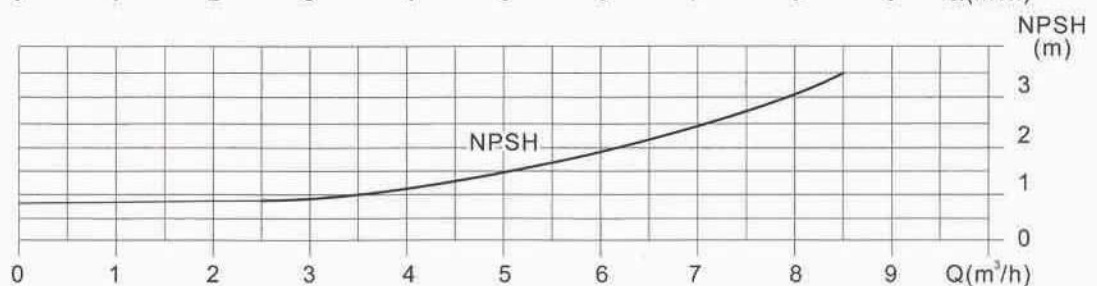
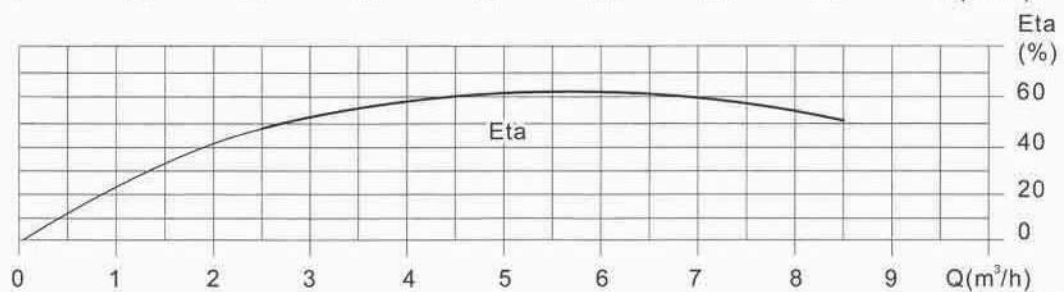
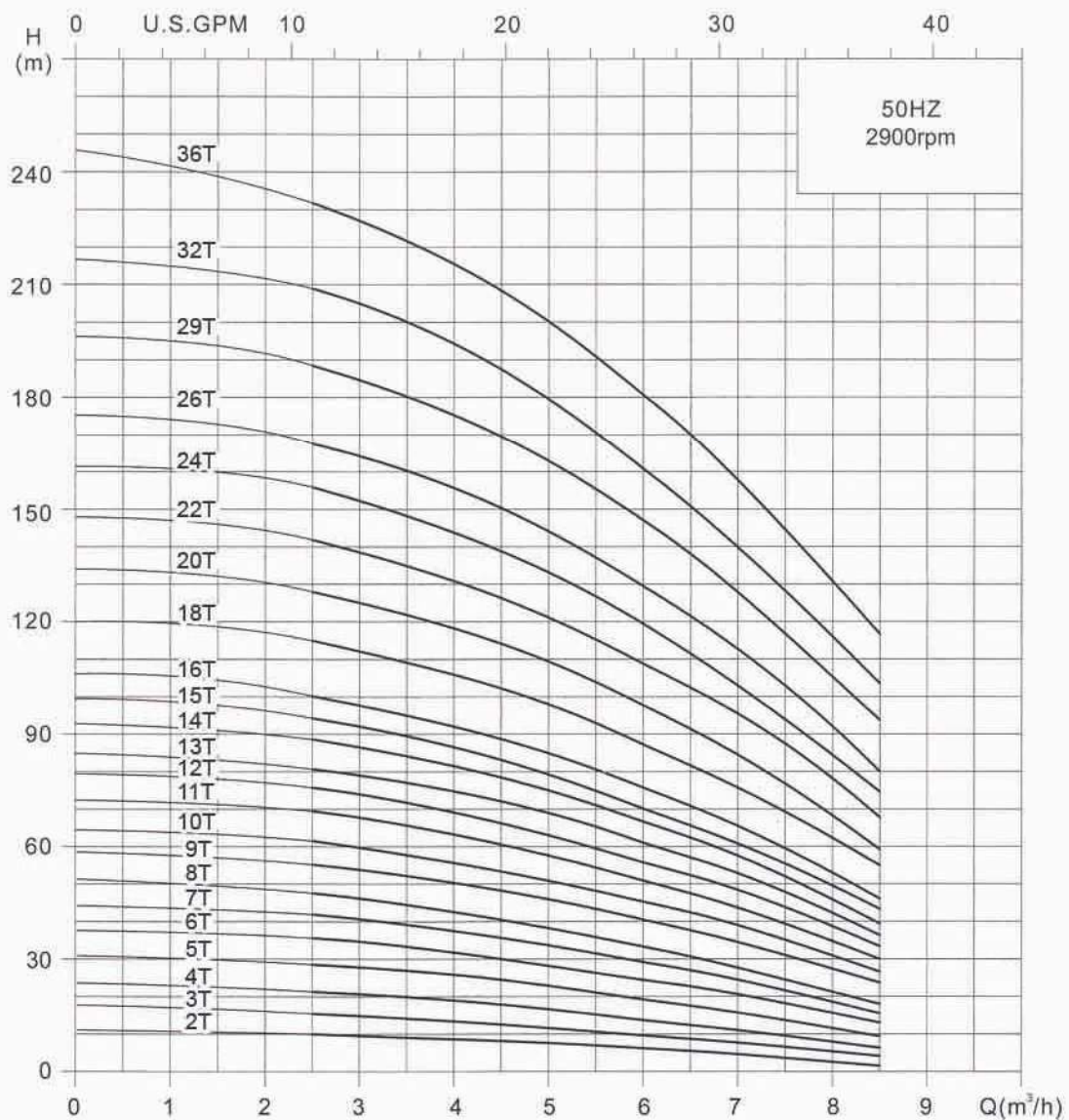


**Flange
(DIN-ANSI-JIS)
PN25/ DN25/32**

Pump Type (2900rpm)	Motor	Dimensions [mm]						Net Weight [kg]	
	P2	Vactaulic		DIN Flange		D1	D2	Vactaulic	DIN Flange
	[kW]	H1	H2	H1	H2				
APE / CVF 4-2T	0.37	234	439	259	464	141	109	19.0	23.0
APE / CVF 4-3T	0.55	252	457	277	482	141	109	20.0	24.0
APE / CVF 4-4T	0.75	270	475	295	500	141	109	23.0	27.0
APE / CVF 4-5T	1.1	294	535	319	560	141	109	26.0	30.0
APE / CVF 4-6T	1.1	312	553	337	578	141	109	26.0	30.0
APE / CVF 4-7T	1.5	330	623	355	648	175	144	34.0	38.0
APE / CVF 4-8T	1.5	348	641	373	666	175	144	35.0	39.0
APE / CVF 4-10T	2.2	392	685	417	710	175	144	37.0	41.0
APE / CVF 4-12T	2.2	428	721	453	746	175	144	38.0	42.0
APE / CVF 4-14T	3.0	464	757	489	782	198	153	45.0	49.0
APE / CVF 4-16T	3.0	500	793	525	818	198	153	48.0	52.0
APE / CVF 4-19T	4.0	574	879	599	904	221	174	57.0	61.0
APE / CVF 4-22T	4.0	628	933	653	958	221	174	58.0	62.0

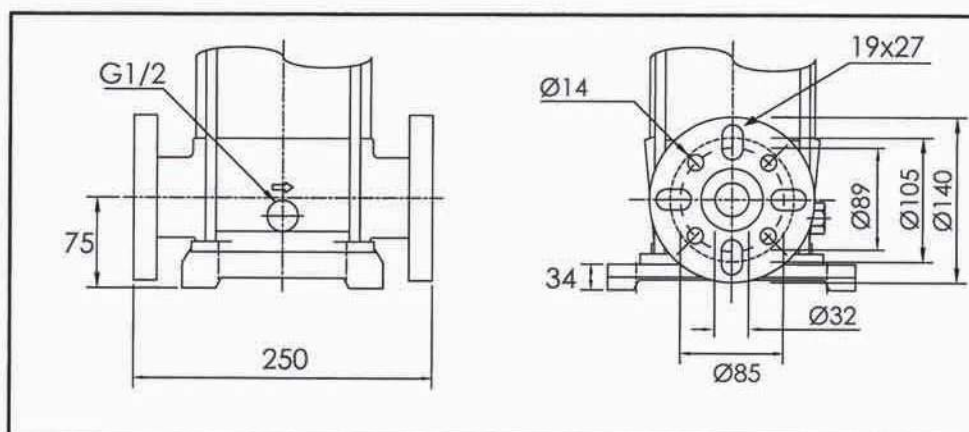
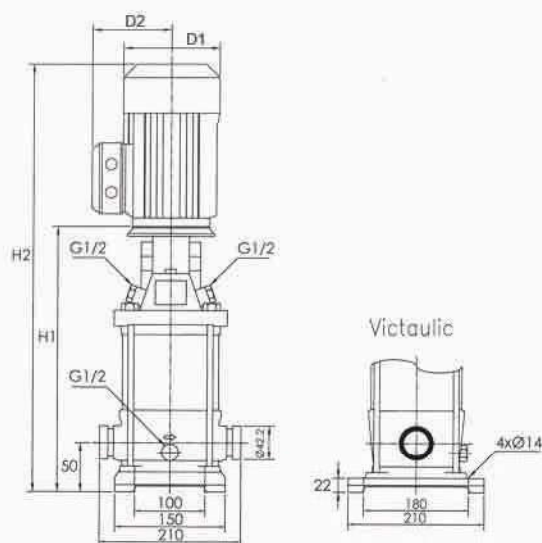
Performance Curve - 2900rpm

APE, CVF 5



Dimensions and Weights - 2900rpm

APE, CVF 5

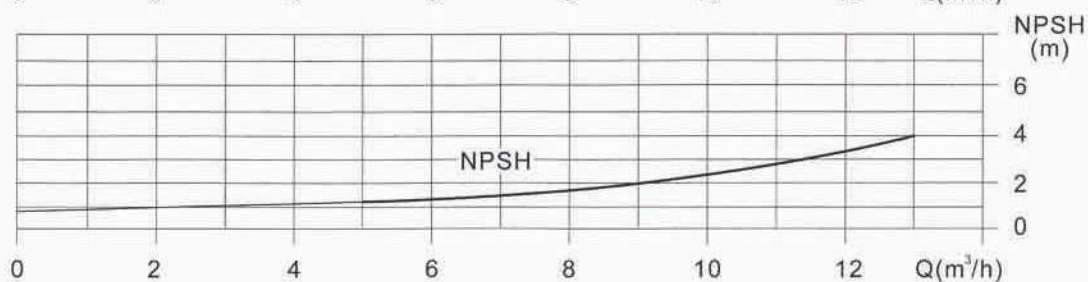
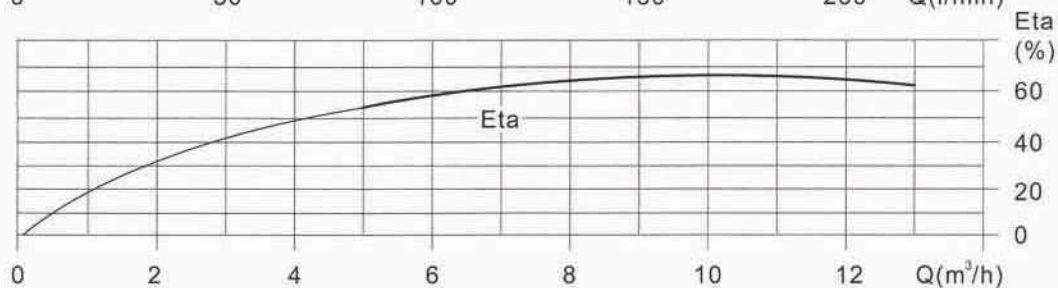
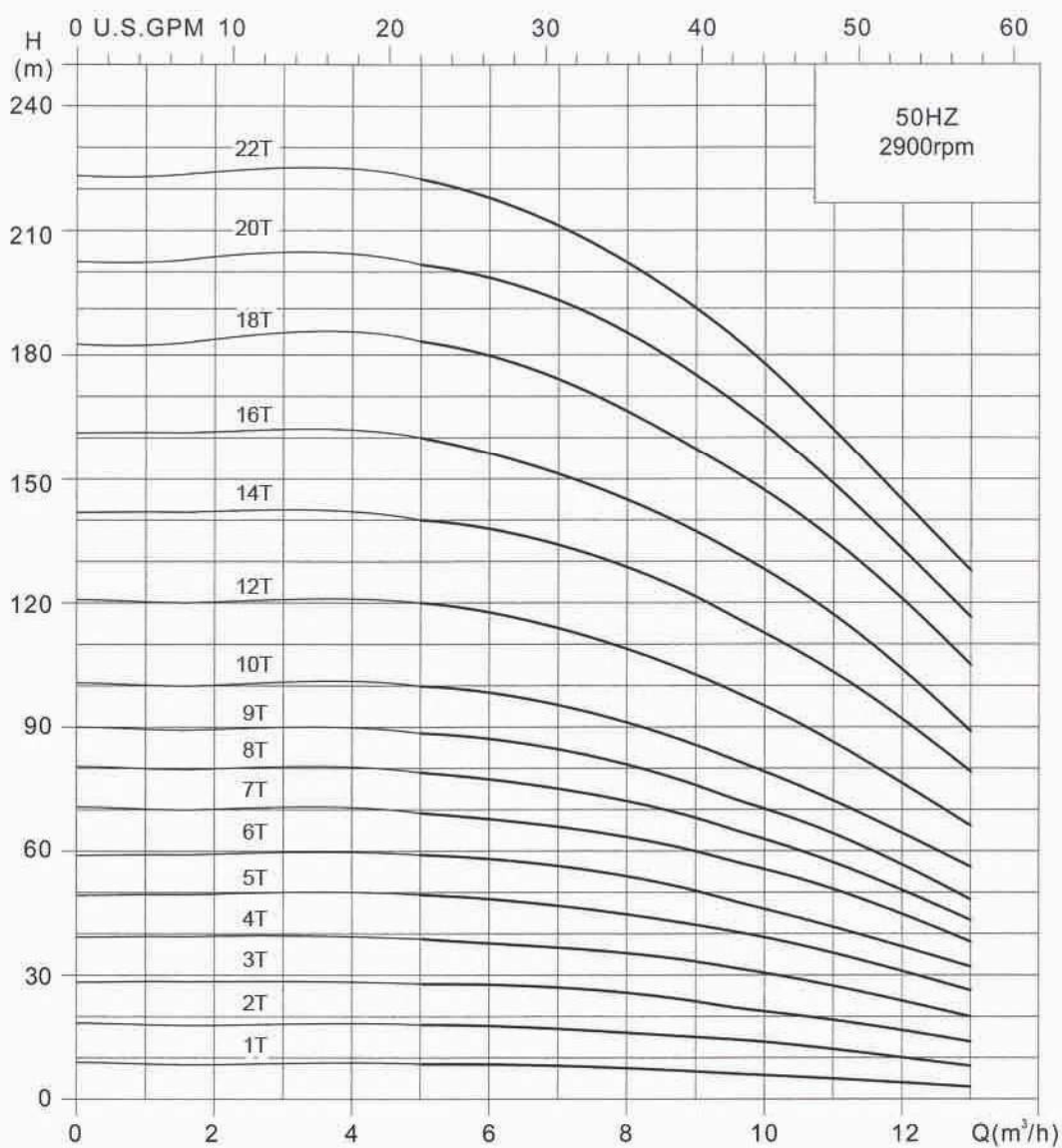


**Flange
(DIN-ANSI-JIS
PN25/ DN25/32)**

Pump Type (2900rpm)	Motor	Dimensions [mm]						Net Weight [kg]	
	P2	Victaulic		DIN Flange		D1	D2	Victaulic	DIN Flange
	[kW]	H1	H2	H1	H2				
APE / CVF 5-2T	0.37	257	448	282	473	141	109	16.0	21.0
APE / CVF 5-3T	0.55	284	475	309	500	141	109	18.0	22.0
APE / CVF 5-4T	0.55	311	502	336	527	141	109	18.0	22.0
APE / CVF 5-5T	0.75	344	575	369	600	141	109	21.0	25.0
APE / CVF 5-6T	1.1	371	602	396	627	141	109	24.0	28.0
APE / CVF 5-7T	1.1	398	629	423	654	141	109	24.0	28.0
APE / CVF 5-8T	1.1	425	656	450	681	141	109	25.0	29.0
APE / CVF 5-9T	1.5	468	714	493	739	175	144	32.5	36.5
APE / CVF 5-10T	1.5	495	741	520	766	175	144	33.5	37.1
APE / CVF 5-11T	2.2	522	794	547	819	175	144	36.1	39.6
APE / CVF 5-12T	2.2	549	821	574	873	175	144	36.7	40.2
APE / CVF 5-13T	2.2	576	848	601	873	175	144	37.2	40.8
APE / CVF 5-14T	2.2	603	875	628	900	175	144	37.8	41.3
APE / CVF 5-15T	2.2	630	902	655	927	175	144	38.4	41.9
APE / CVF 5-16T	2.2	657	929	682	954	175	144	39.0	42.5
APE / CVF 5-18T	3.0	715	1039	740	1064	198	153	47.5	51.1
APE / CVF 5-20T	3.0	769	1093	794	1118	198	153	48.7	52.2
APE / CVF 5-22T	4.0	823	1153	848	1178	221	174	56.8	60.4
APE / CVF 5-24T	4.0	877	1207	902	1232	221	174	58.0	61.5
APE / CVF 5-26T	4.0	931	1261	956	1286	221	174	59.1	62.6
APE / CVF 5-29T	4.0	1012	1342	1037	1364	221	174	60.8	64.4
APE / CVF 5-32T	5.5	1123	1518	1148	1543	275	195	79.7	83.2
APE / CVF 5-36T	5.5	1231	1626	1256	1651	275	195	82.0	85.5

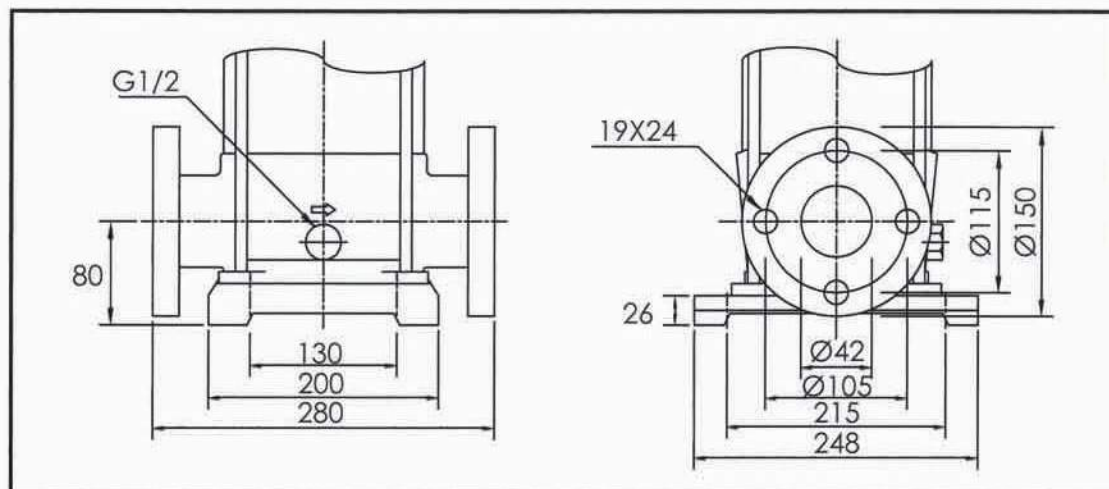
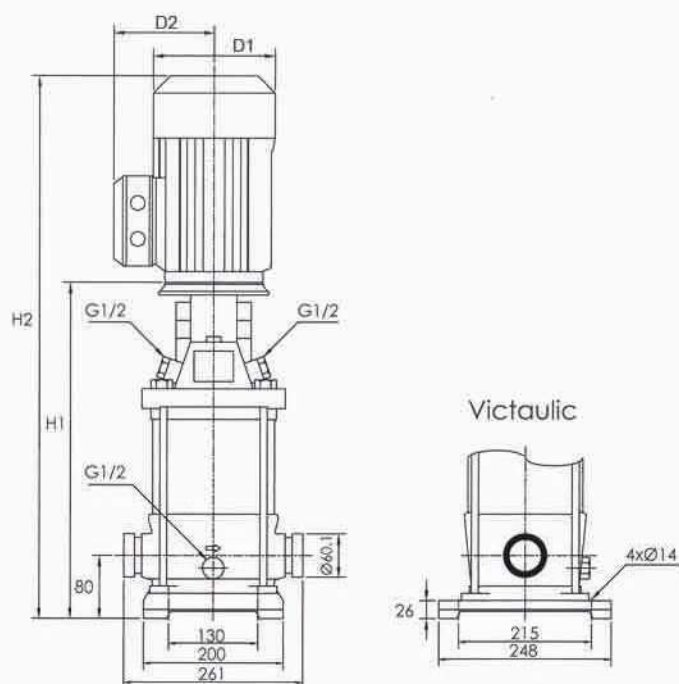
Performance Curve - 2900rpm

APE, CVF 10



Dimensions and Weights - 2900rpm

APE, CVF 10

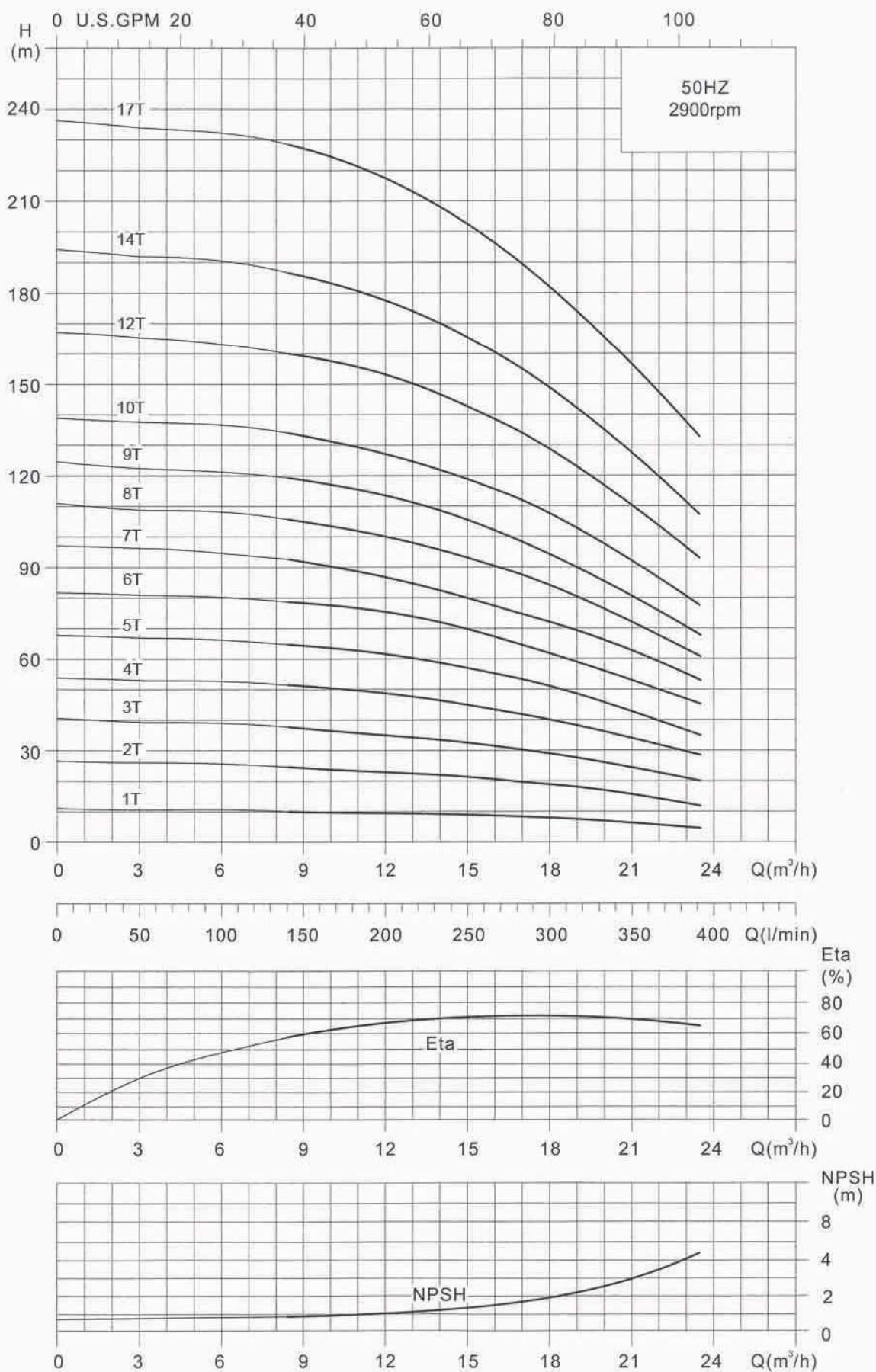


**Flange
(DIN-ANSI-JIS)
PN25/DN40**

Pump Type (2900rpm)	Motor	Dimensions [mm]						Net Weight [kg]	
	P2	Victaulic		DIN Flange		D1	D2	Victaulic	DIN Flange
	[kW]	H1	H2	H1	H2				
APE / CVF 10-1T	0.37	353	544	353	544	141	109	28.0	32.0
APE / CVF 10-2T	0.75	357	588	357	588	141	109	31.0	34.0
APE / CVF 10-3T	1.1	387	618	387	618	141	109	34.0	38.0
APE / CVF 10-4T	1.5	433	679	433	679	175	144	43.6	47.1
APE / CVF 10-5T	2.2	463	735	463	735	175	144	46.6	50.1
APE / CVF 10-6T	2.2	493	765	493	765	175	144	47.6	51.1
APE / CVF 10-7T	3.0	528	852	528	852	198	153	55.4	58.9
APE / CVF 10-8T	3.0	558	882	558	882	198	153	56.4	60.0
APE / CVF 10-9T	3.0	588	912	588	912	198	153	57.5	61.0
APE / CVF 10-10T	4.0	618	948	618	948	221	174	65.5	69.0
APE / CVF 10-12T	4.0	678	1008	678	1008	221	174	67.5	71.0
APE / CVF 10-14T	5.5	770	1165	770	1165	275	195	92.9	96.4
APE / CVF 10-16T	5.5	830	1225	830	1225	275	195	94.9	98.5
APE / CVF 10-18T	7.5	890	1325	890	1325	275	195	105.0	108.5
APE / CVF 10-20T	7.5	950	1385	950	1385	275	195	107.0	110.5
APE / CVF 10-22T	7.5	1010	1445	1010	1445	275	195	109.1	112.6

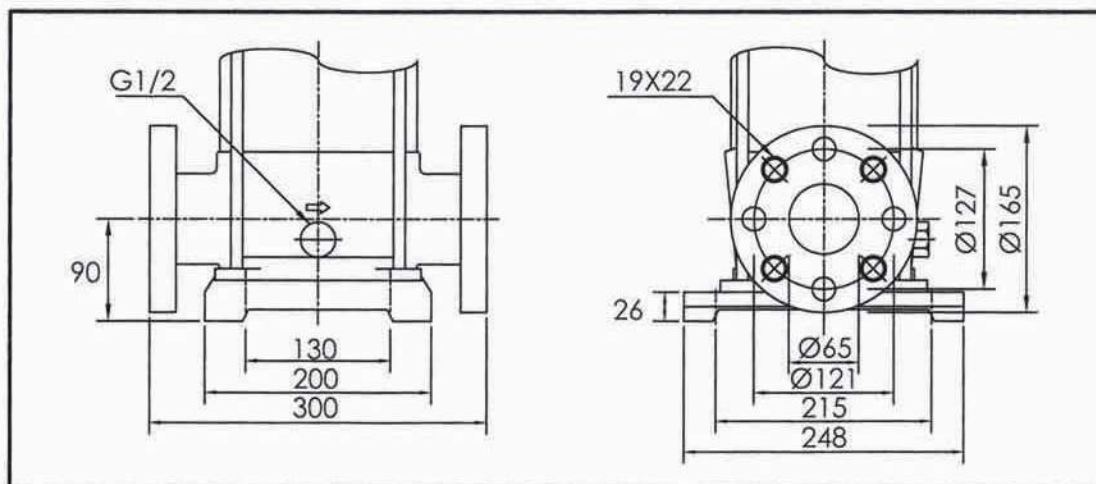
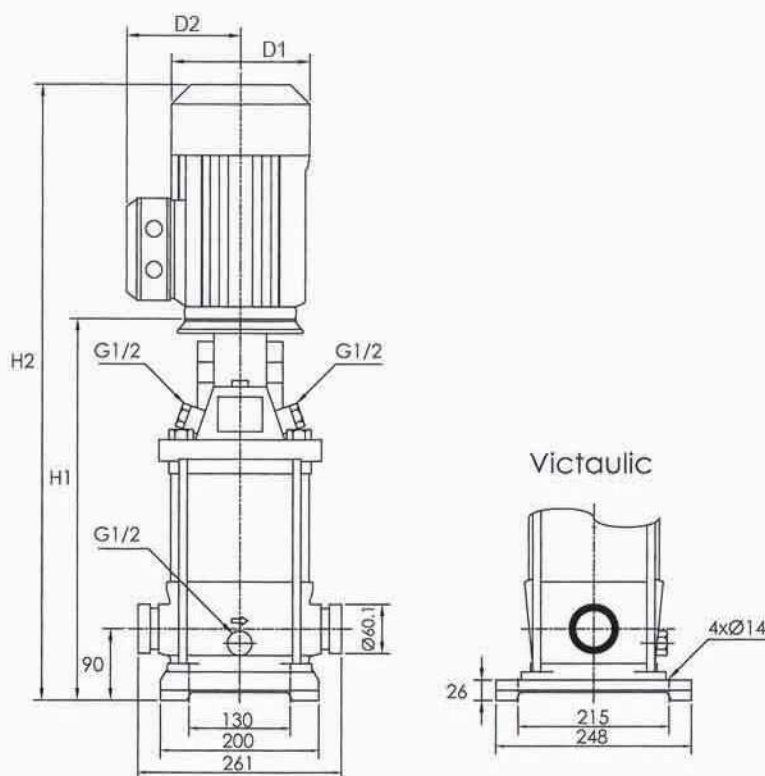
Performance Curve - 2900rpm

APE, CVF 15



Dimensions and Weights - 2900rpm

APE, CVF 15

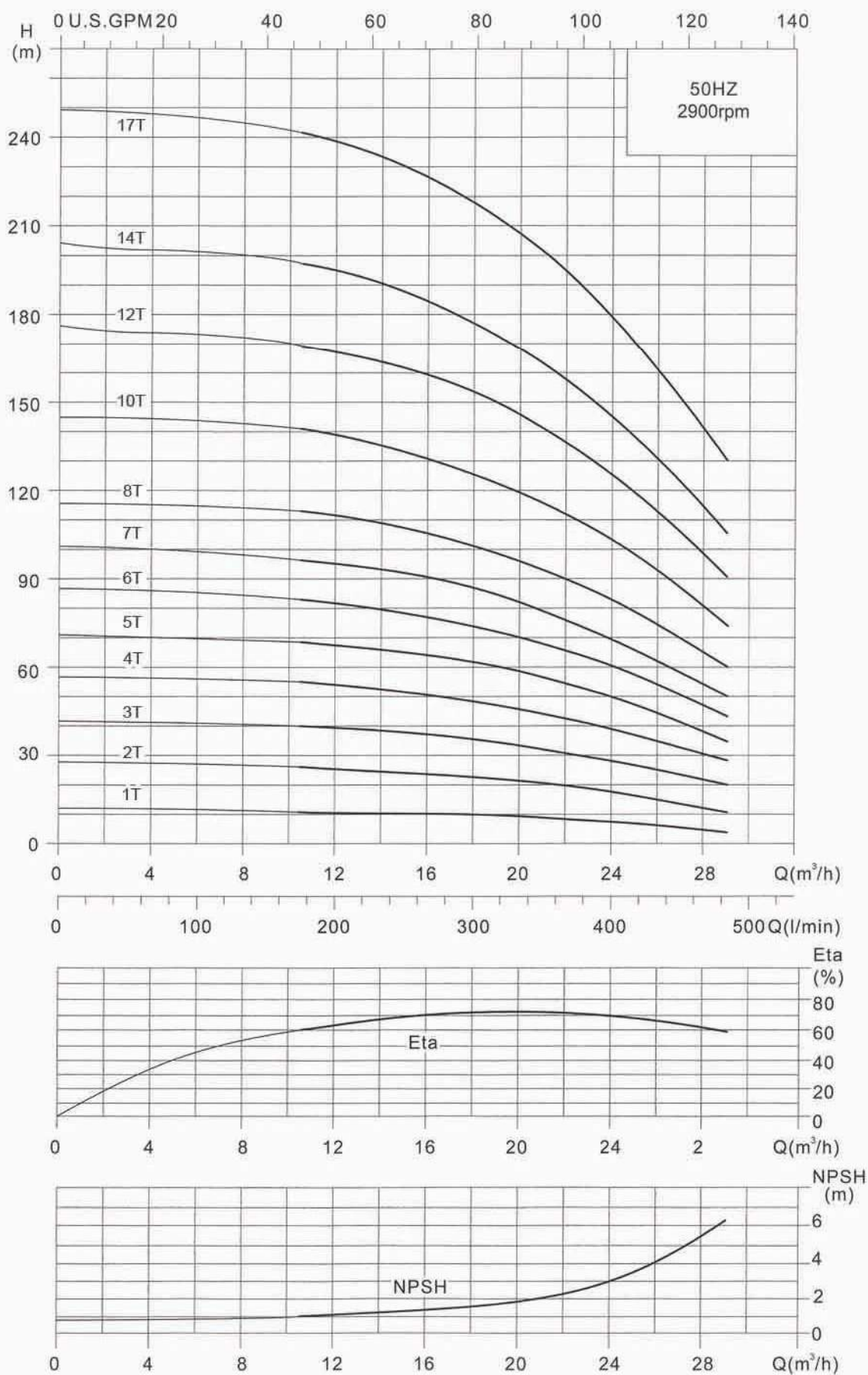


**Flange
(DIN-ANSI-JIS)
PN16-25/ DN50**

Pump Type (2900rpm)	Motor	Dimensions [mm]						Net Weight [kg]	
	P2	Victaulic		DIN Flange		D1	D2	Victaulic	DIN Flange
	[kW]	H1	H2	H1	H2				
APE / CVF 15-1T	1.1	387	618	397	628	141	109	34.0	42.0
APE / CVF 15-2T	2.2	403	675	413	685	175	144	44.3	48.8
APE / CVF 15-3T	3.0	453	777	463	787	198	153	52.5	57.0
APE / CVF 15-4T	4.0	498	828	508	838	221	174	60.9	65.4
APE / CVF 15-5T	4.0	543	873	553	883	221	174	62.3	66.8
APE / CVF 15-6T	5.5	620	1015	630	1025	275	195	87.1	91.6
APE / CVF 15-7T	5.5	665	1 060	675	1070	275	195	88.5	93.0
APE / CVF 15-8T	7.5	710	1145	720	1155	275	195	97.9	102.4
APE / CVF 15-9T	7.5	755	1190	765	1200	275	195	99.3	103.8
APE / CVF 15-10T	11.0	877	1375	887	1385	334	263	176.4	180.9
APE / CVF 15-12T	11.0	967	1465	977	1475	334	263	179.2	183.7
APE / CVF 15-14T	11.0	1057	1555	1067	1565	334	263	182.0	186.5
APE / CVF 15-17T	15.0	1192	1690	1202	1700	334	263	186.2	190.7

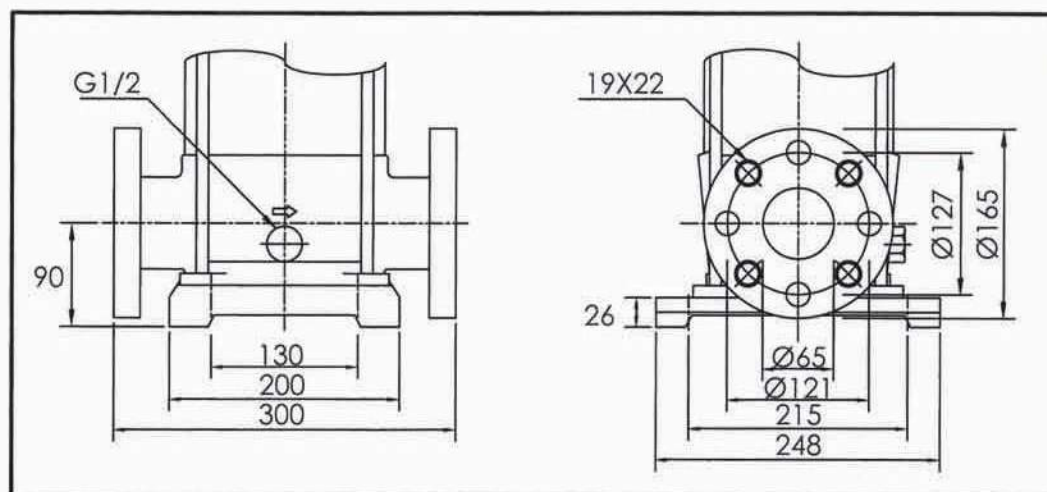
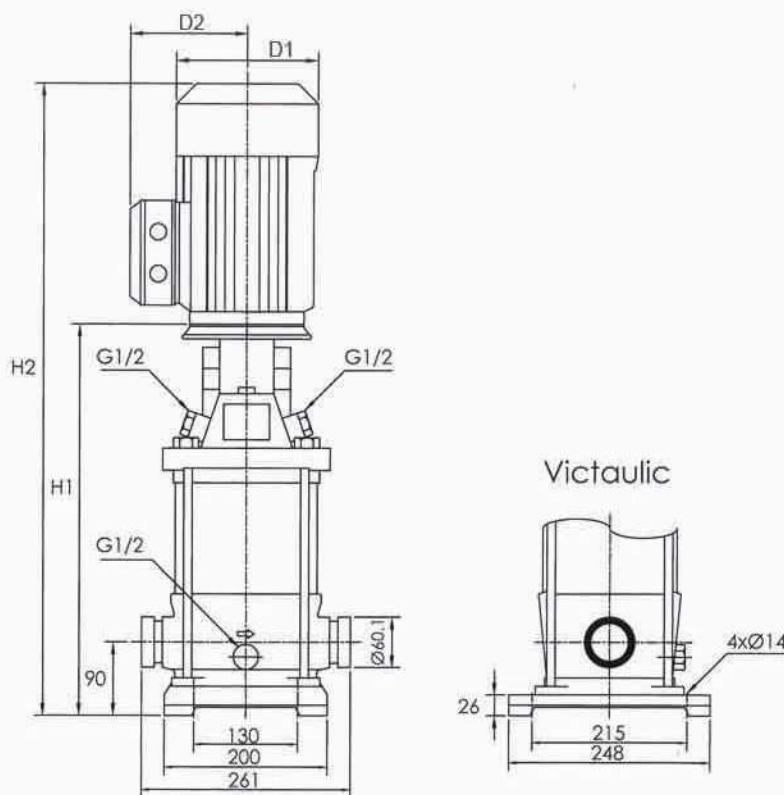
Performance Curve - 2900rpm

APE, CVF 20



Dimensions and Weights - 2900rpm

APE, CVF 20

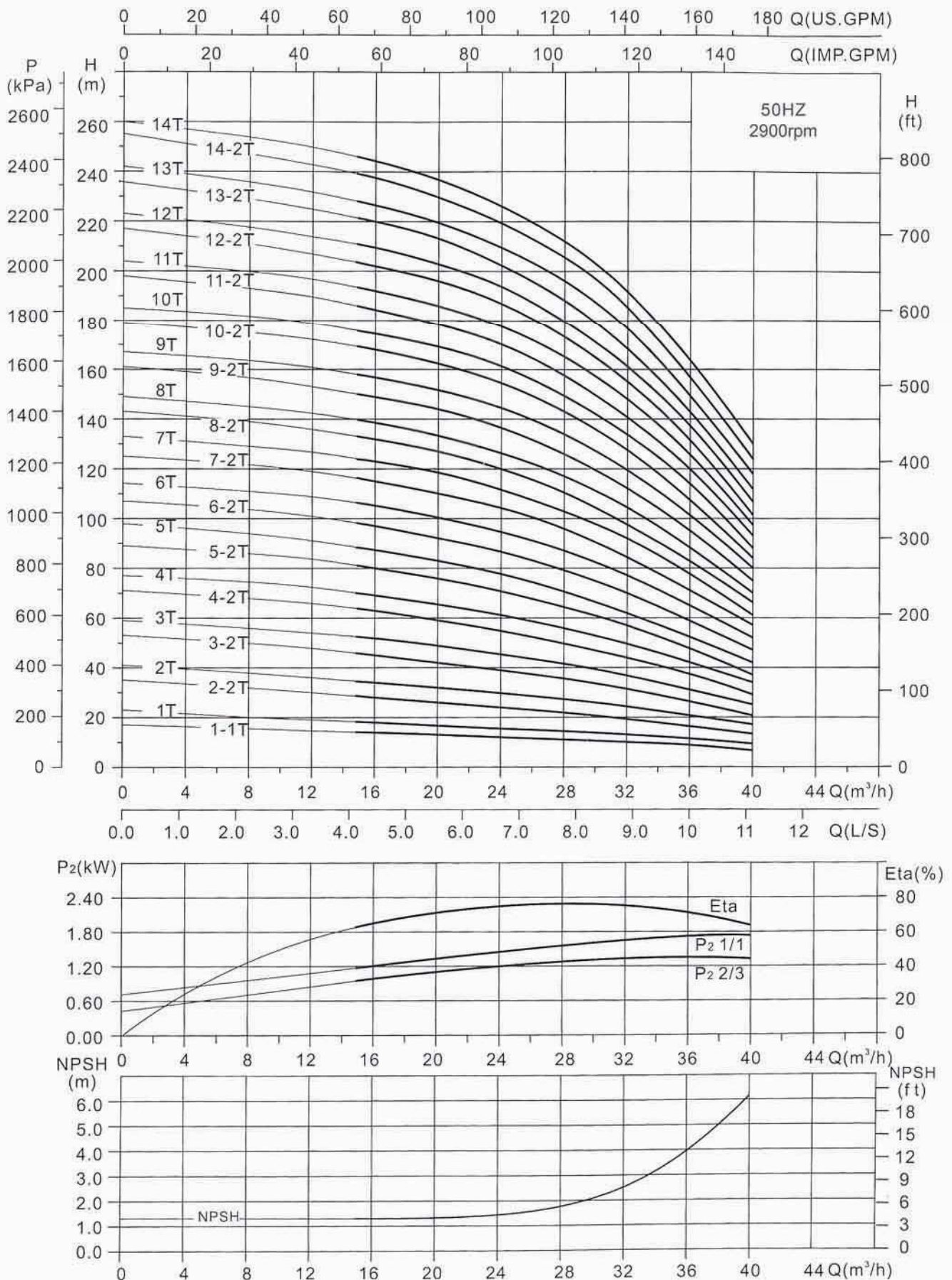


**Flange
(DIN-ANSI-JIS)
PN16-25-40 / DN50**

Pump Type (2900rpm)	Motor	Dimensions [mm]						Net Weight [kg]	
	P2	Victaulic		DIN Flange		D1	D2	Victaulic	DIN Flange
	[kW]	H1	H2	H1	H2				
APE / CVF 20-1T	1.1	387	618	397	628	141	109	34.0	39.0
APE / CVF 20-2T	2.2	403	675	413	685	175	144	44.3	48.8
APE / CVF 20-3T	4.0	453	783	463	793	221	174	59.5	64.0
APE / CVF 20-4T	5.5	530	925	540	935	275	195	84.3	88.8
APE / CVF 20-5T	5.5	575	970	585	980	275	195	85.7	90.2
APE / CVF 20-6T	7.5	620	1055	630	1065	275	195	95.1	99.6
APE / CVF 20-7T	7.5	665	1100	675	1110	275	195	96.5	101.0
APE / CVF 20-8T	11.0	787	1285	797	1295	334	263	173.6	178.1
APE / CVF 20-10T	11.0	877	1375	887	1385	334	263	176.4	180.9
APE / CVF 20-12T	15.0	967	1465	977	1475	334	263	179.2	183.7
APE / CVF 20-14T	15.0	1057	1555	1067	1565	334	263	182.0	186.5
APE / CVF 20-17T	18.5	1192	1734	1202	1744	334	263	208.2	212.7

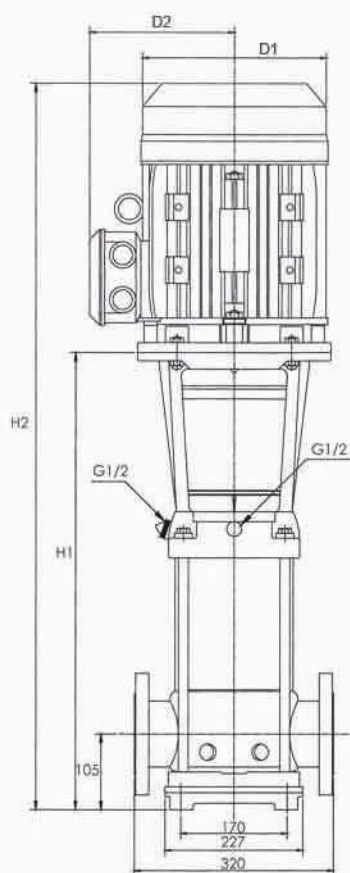
Performance Curve - 2900rpm

APE, CVF 32

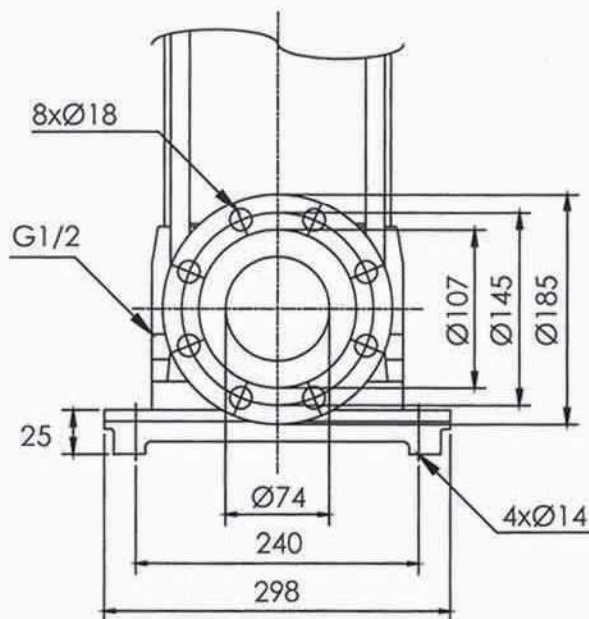


Dimensions and Weights - 2900rpm

APE, CVF 32



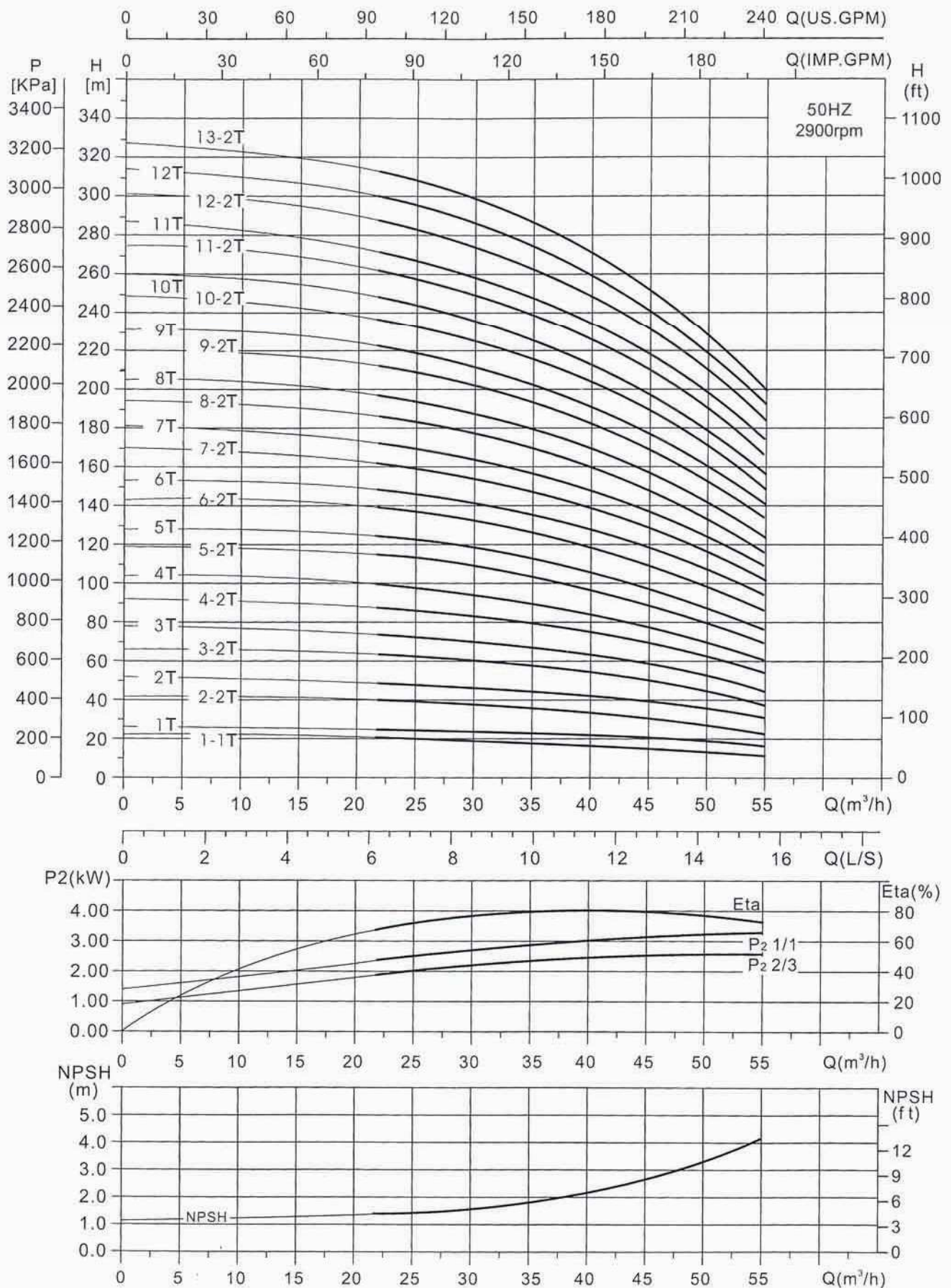
PN16-25-40 / DN65



Pump Type (2900rpm)	Motor	Dimensions [mm]				Net Weight [kg]
	P2	DIN Flange		D1	D2	DIN Flange
	[kW]	H1	H2			
APE / CVF 32-1-1T	1.5	504	750	175	144	64.6
APE / CVF 32-1T	2.2	504	776	175	144	66.7
APE / CVF 32-2-2T	3.0	574	898	198	153	76.6
APE / CVF 32-2T	4.0	574	904	221	174	83.6
APE / CVF 32-3-2T	4.0	644	1039	275	195	99.0
APE / CVF 32-3T	5.5	644	1039	275	195	99.0
APE / CVF 32-4-2T	7.5	714	1149	275	195	110.0
APE / CVF 32-4T	7.5	714	1149	275	195	110.1
APE / CVF 32-5-2T	11.0	894	1392	334	263	192.1
APE / CVF 32-5T	11.0	894	1392	334	263	192.2
APE / CVF 32-6-2T	11.0	964	1462	334	263	195.1
APE / CVF 32-6T	11.0	964	1462	334	263	195.2
APE / CVF 32-7-2T	15.0	1034	1532	334	263	198.2
APE / CVF 32-7T	15.0	1034	1532	334	263	198.2
APE / CVF 32-8-2T	15.0	1104	1602	334	263	201.4
APE / CVF 32-8T	15.0	1104	1602	334	263	201.4
APE / CVF 32-9-2T	18.5	1174	1716	334	263	226.0
APE / CVF 32-9T	18.5	1174	1716	334	263	226.1
APE / CVF 32-10-2T	18.5	1244	1786	334	263	228.6
APE / CVF 32-10T	18.5	1244	1786	334	263	228.7
APE / CVF 32-11-2T	22.0	1314	1876	382	305	272.0
APE / CVF 32-11T	22.0	1314	1876	382	305	272.0
APE / CVF 32-12-2T	22.0	1384	1946	382	305	274.6
APE / CVF 32-12	22.0	1384	1946	382	305	274.6
APE / CVF 32-13-2T	30.0	1454	2054	382	305	316.5
APE / CVF 32-13T	30.0	1454	2054	382	305	316.5
APE / CVF 32-14-2T	30.0	1524	2124	382	305	319.1
APE / CVF 32-14T	30.0	1524	2124	382	305	319.1

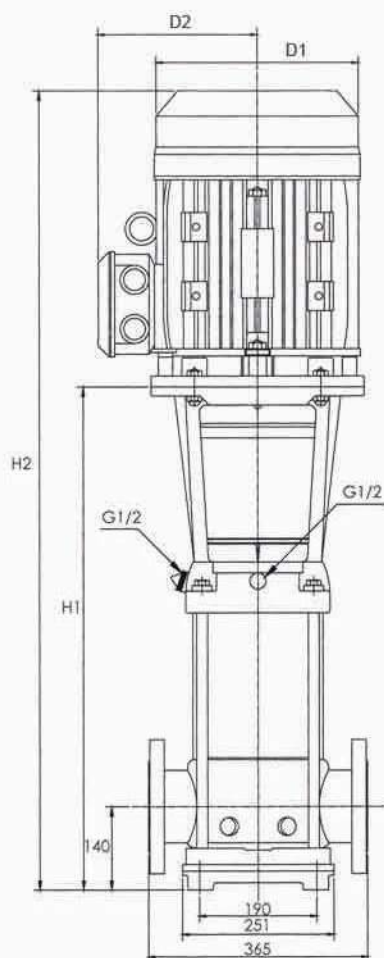
Performance Curve - 2900rpm

APE, CVF 45

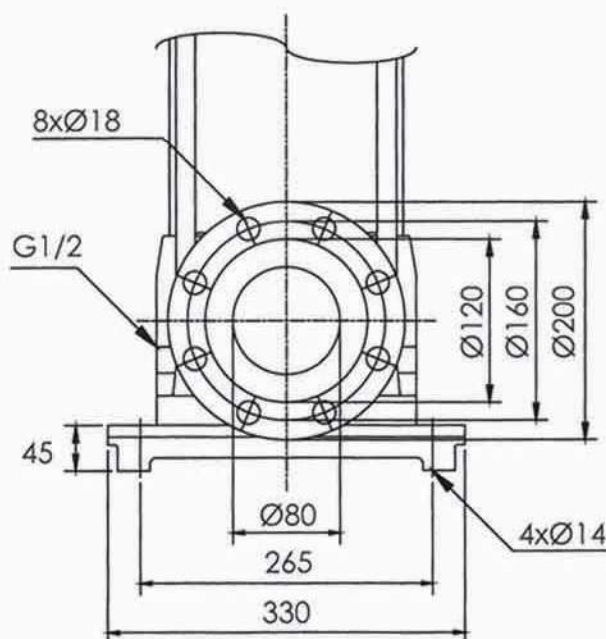


Dimensions and Weights - 2900rpm

APE, CVF 45



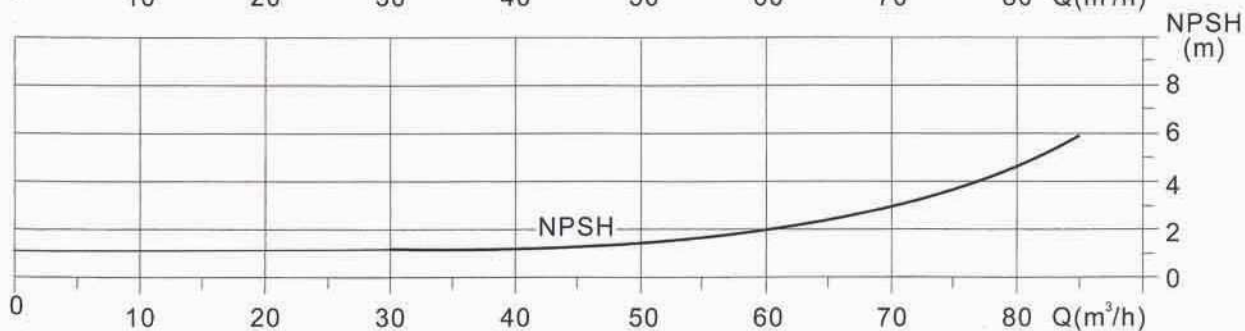
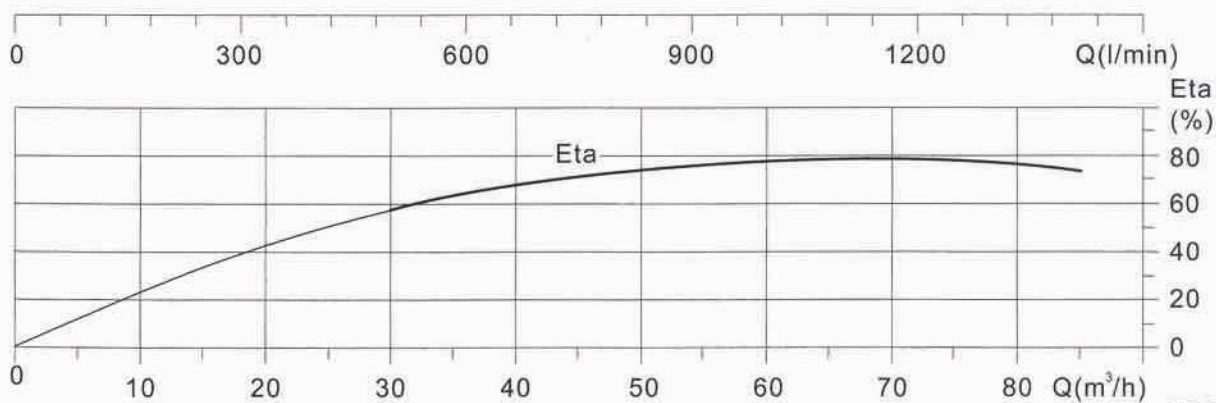
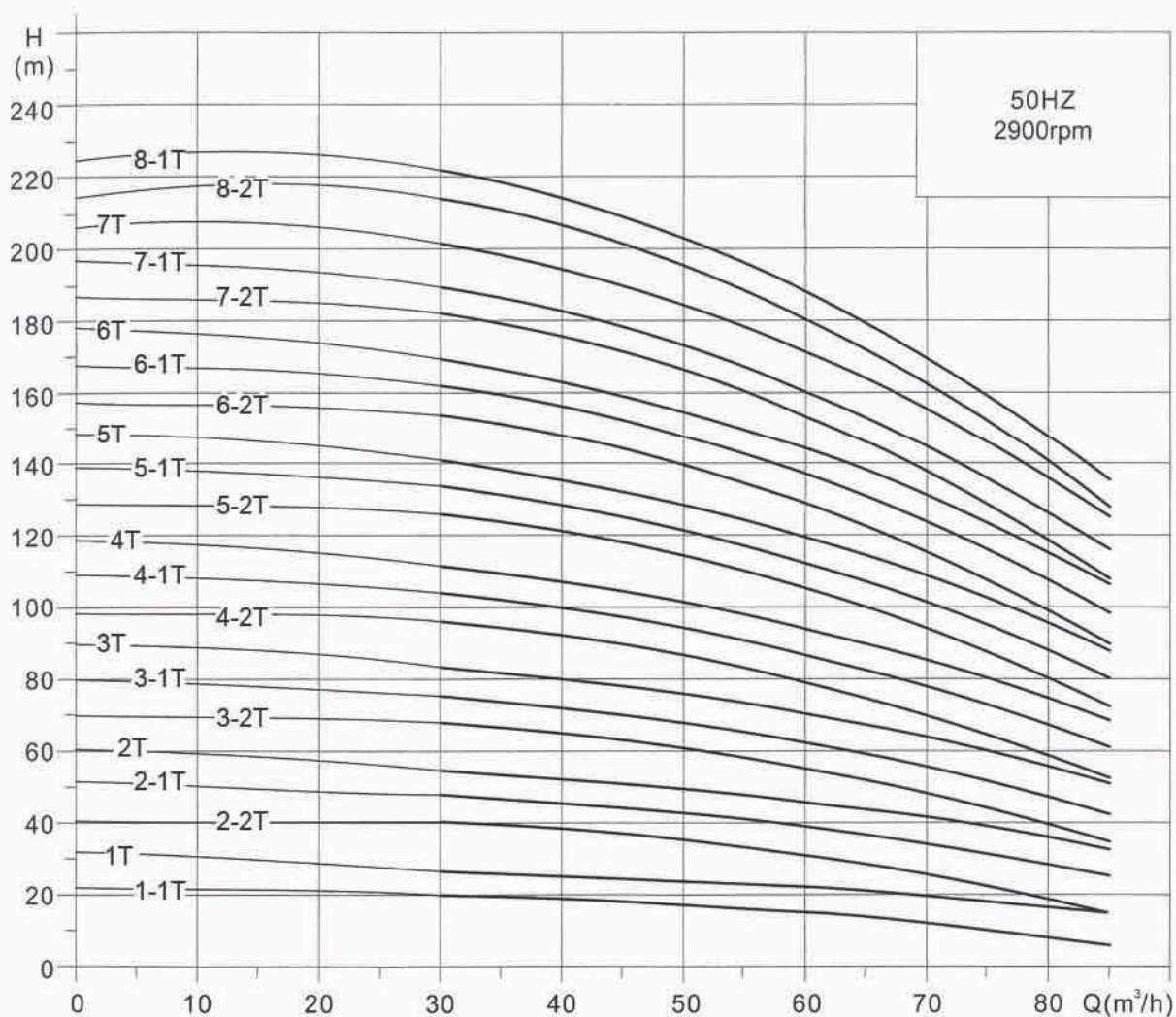
PN16-25-40 / DN80



Pump Type (2900rpm)	Motor	Dimensions [mm]				Net Weight [kg]
	P2	DIN Flange		D1	D2	DIN Flange
	[kW]	H1	H2			
APE / CVF 45-1-1T	3.0	559	879	196	148	79.3
APE / CVF 45-1T	4.0	559	894	219	162	86.3
APE / CVF 45-2-2T	5.5	639	999	234	199	103.8
APE / CVF 45-2T	7.5	639	1039	234	199	112.8
APE / CVF 45-3-2T	11.0	829	1274	268	215	150.0
APE / CVF 45-3T	11.0	829	1274	268	215	150.1
APE / CVF 45-4-2T	15.0	909	1398	268	215	164.7
APE / CVF 45-4T	15.0	909	1398	268	215	164.7
APE / CVF 45-5-2T	18.5	989	1524	317	242	203.4
APE / CVF 45-5T	18.5	989	1524	317	242	203.4
APE / CVF 45-6-2T	22.0	1069	1648	317	242	217.8
APE / CVF 45-6T	22.0	1069	1648	317	242	217.8
APE / CVF 45-7-2T	30.0	1149	1772	317	290	306.7
APE / CVF 45-7T	30.0	1149	1772	317	290	306.7
APE / CVF 45-8-2T	30.0	1229	1852	317	290	310.4
APE / CVF 45-8T	30.0	1229	1852	317	290	310.4
APE / CVF 45-9-2T	30.0	1309	1932	317	290	383.1
APE / CVF 45-9T	37.0	1309	2034	398	365	383.1
APE / CVF 45-10-2T	37.0	1389	2114	398	365	386.7
APE / CVF 45-10T	37.0	1389	2114	398	365	386.7
APE / CVF 45-11-2T	45.0	1469	2194	398	365	418.3
APE / CVF 45-11T	45.0	1469	2194	398	365	418.3
APE / CVF 45-12-2T	45.0	1549	2274	398	365	421.9
APE / CVF 45-12T	45.0	1549	2274	398	365	421.9
APE / CVF 45-13-2T	45.0	1629	2354	398	365	425.5

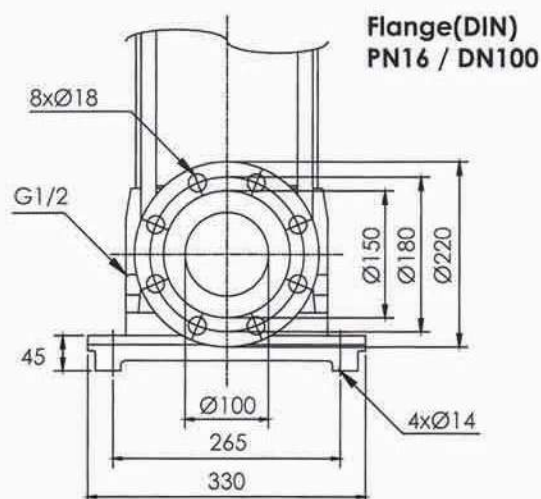
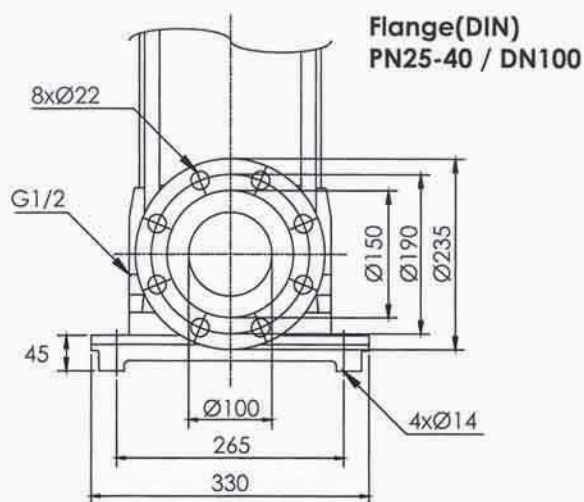
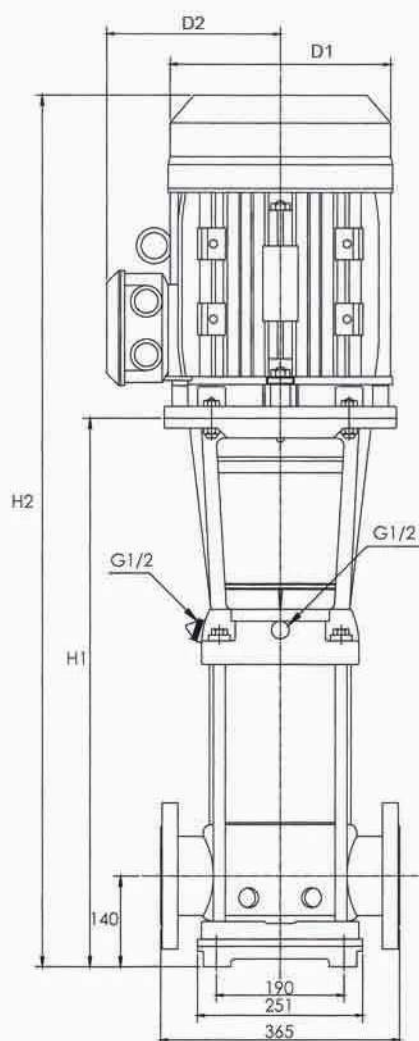
Performance Curve - 2900rpm

APE, CVF 64



Dimensions and Weights - 2900rpm

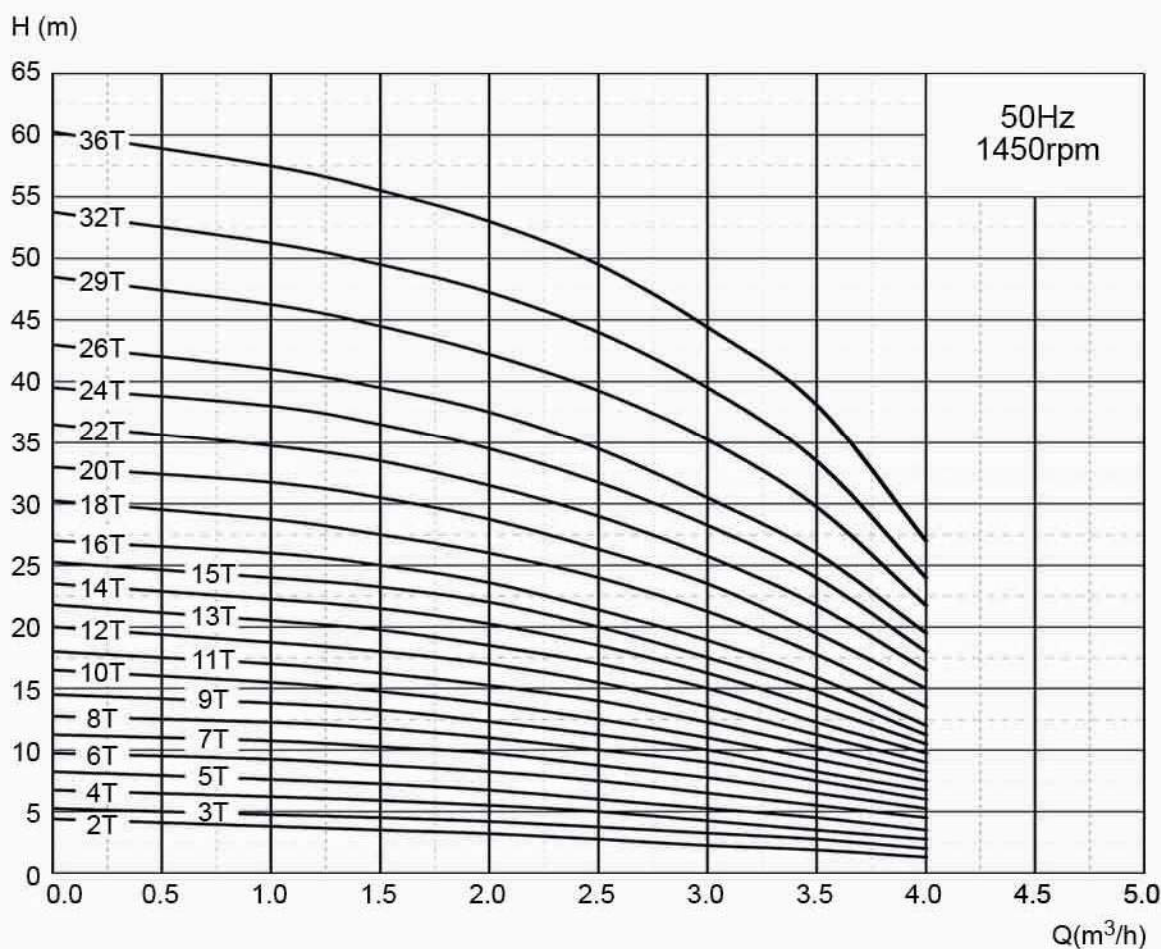
APE, CVF 64



Pump Type (2900rpm)	Motor	Dimensions [mm]				Net Weight [kg]
	P2	DIN Flange		D1	D2	DIN Flange
	[kW]	H1	H2			
APE / CVF 64-1-1T	4.0	563	898	219	162	91.0
APE / CVF 64-1T	5.5	563	923	234	199	102.0
APE / CVF 64-2-2T	7.5	646	1046	234	199	114.0
APE / CVF 64-2-1T	11.0	756	1201	268	215	173.0
APE / CVF 64-2T	11.0	756	1201	268	215	173.0
APE / CVF 64-3-2T	15.0	838	1327	268	215	203.0
APE / CVF 64-3-1T	15.0	838	1327	268	215	203.0
APE / CVF 64-3T	18.5	838	1373	317	242	217.0
APE / CVF 64-4-2T	18.5	921	1456	317	242	221.0
APE / CVF 64-4-1T	22.0	921	1500	317	242	259.0
APE / CVF 64-4T	22.0	921	1500	317	242	259.0
APE / CVF 64-5-2T	30.0	1003	1626	317	290	377.0
APE / CVF 64-5-1T	30.0	1003	1626	317	290	377.0
APE / CVF 64-5T	30.0	1003	1626	317	290	377.0
APE / CVF 64-6-2T	30.0	1086	1709	317	290	382.0
APE / CVF 64-6-1T	37.0	1086	1811	398	365	380.0
APE / CVF 64-6T	37.0	1086	1811	398	365	380.0
APE / CVF 64-7-2T	37.0	1168	1893	398	365	384.0
APE / CVF 64-7-1T	37.0	1168	1893	398	365	384.0
APE / CVF 64-7T	45.0	1172	1897	398	365	447.0
APE / CVF 64-8-2T	45.0	1255	1980	398	365	451.0
APE / CVF 64-8-1T	45.0	1255	1980	398	365	451.0

Performance Curve - 1450rpm

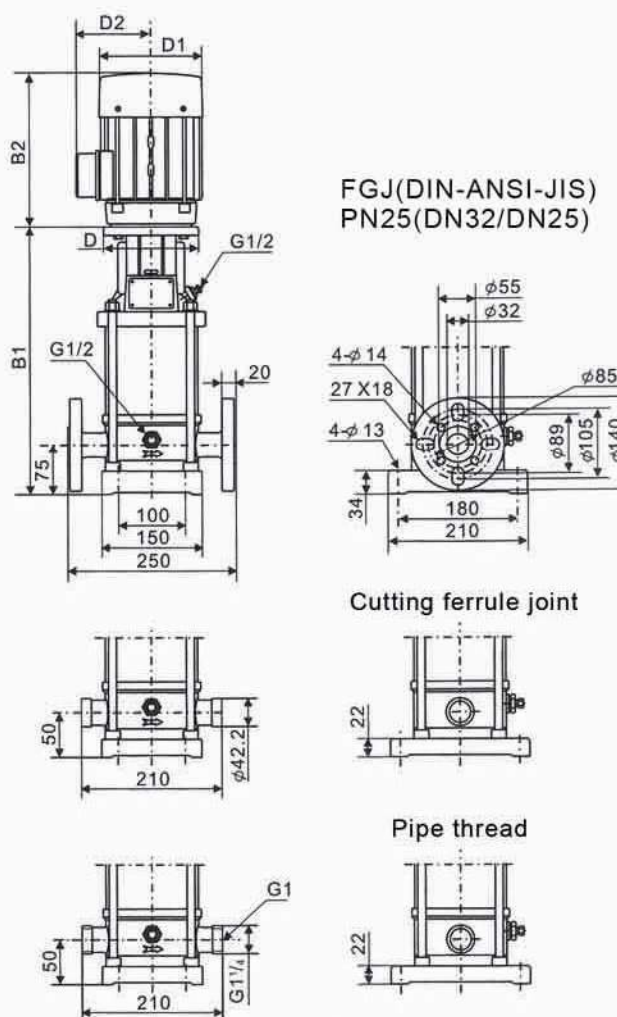
APE, CVF 5



Pump Type (1450 rpm)	Motor	Flow	0	1	1.5	2	2.5	3	3.5	4
	P2 [kW]	Q [m³/h]								
APE / CVF 5-2T	0.37	Head H [m]	4.4	3.8	3.5	3.2	2.8	2.3	1.9	1.3
APE / CVF 5-3T	0.37		5.3	4.8	4.5	4.2	3.8	3.3	2.8	2.0
APE / CVF 5-4T	0.37		6.8	6.2	5.9	5.5	5.0	4.3	3.5	2.8
APE / CVF 5-5T	0.37		8.3	7.6	7.3	6.8	6.0	5.3	4.5	3.5
APE / CVF 5-6T	0.37		9.8	9.3	8.8	8.3	7.5	6.5	5.5	4.5
APE / CVF 5-7T	0.37		11.3	10.8	10.3	9.8	8.8	7.8	6.5	5.3
APE / CVF 5-8T	0.37		12.8	12.3	11.8	11.0	10.0	9.0	7.5	6.0
APE / CVF 5-9T	0.37		14.5	13.8	13.3	12.3	11.3	10.0	8.3	6.8
APE / CVF 5-10T	0.37		16.5	15.5	14.8	13.8	12.5	11.0	9.3	7.5
APE / CVF 5-11T	0.37		18.0	17.0	16.3	15.3	14.0	12.3	10.3	8.3
APE / CVF 5-12T	0.37		20.0	18.8	18.0	17.0	15.5	13.5	11.3	9.0
APE / CVF 5-13T	0.37		21.8	20.5	19.8	18.5	17.0	15.0	12.3	9.8
APE / CVF 5-14T	0.37		23.5	22.3	21.5	20.3	18.5	16.3	13.5	10.5
APE / CVF 5-15T	0.37		25.3	24.0	23.3	22.0	20.0	17.5	14.8	11.3
APE / CVF 5-16T	0.55		27.0	26.0	25.0	23.6	21.4	18.9	15.9	12.0
APE / CVF 5-18T	0.55		30.3	28.8	27.5	26.0	24.0	21.3	17.8	13.5
APE / CVF 5-20T	0.55		33.0	31.8	30.5	28.8	26.3	23.5	19.5	15.0
APE / CVF 5-22T	0.55		36.5	34.8	33.5	31.5	29.0	25.8	21.8	16.5
APE / CVF 5-24T	0.75		39.5	38.0	36.5	34.5	31.8	28.3	24.0	18.0
APE / CVF 5-26T	0.75		43.0	41.0	39.5	37.5	34.5	30.5	26.0	19.5
APE / CVF 5-29T	0.75		48.5	46.3	44.5	42.2	39.3	35.3	29.8	21.8
APE / CVF 5-32T	0.75		53.8	51.3	49.5	47.3	44.0	39.5	33.5	24.0
APE / CVF 5-36T	1.1		60.3	57.5	55.5	53.0	49.5	44.4	38.1	27.0

Dimensions and Weights - 1450rpm

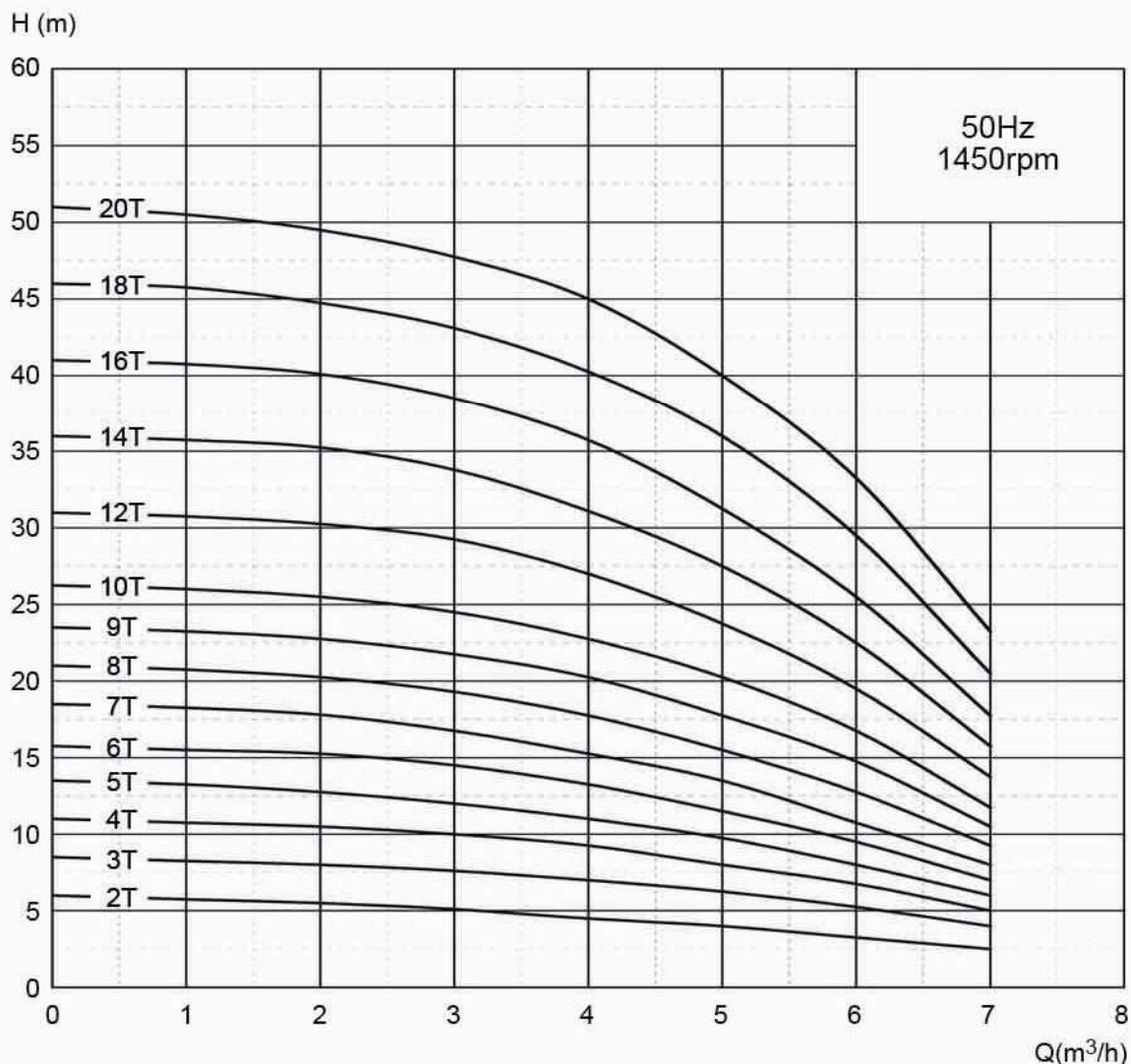
APE, CVF 5



Pump Type (1450rpm)	Dimensions [mm]						Weight [kg]
	B1	B2	B1 + B2	D	D1	D2	
APE / CVF 5-2T	277	210	487	--	133	102	21
APE / CVF 5-3T	304	210	514	--	133	102	21
APE / CVF 5-4T	331	210	541	--	133	102	22
APE / CVF 5-5T	358	210	568	--	133	102	24
APE / CVF 5-6T	391	210	601	--	154	111	27
APE / CVF 5-7T	418	210	628	--	154	111	28
APE / CVF 5-8T	445	210	655	--	154	111	29
APE / CVF 5-9T	472	210	682	--	154	111	35
APE / CVF 5-10T	499	210	709	--	154	111	36
APE / CVF 5-11T	534	210	744	--	177	116	37
APE / CVF 5-12T	561	210	771	--	177	116	38
APE / CVF 5-13T	588	210	798	--	177	116	39
APE / CVF 5-14T	615	210	825	--	177	116	40
APE / CVF 5-15T	642	210	852	--	177	116	41
APE / CVF 5-16T	669	290	959	--	177	116	42
APE / CVF 5-18T	723	290	1013	--	177	116	45
APE / CVF 5-20T	777	290	1067	--	177	116	46
APE / CVF 5-22T	851	290	1141	--	197	148	58
APE / CVF 5-24T	905	290	1195	--	197	148	59
APE / CVF 5-26T	959	290	1249	--	197	148	61
APE / CVF 5-29T	1040	290	1330	--	197	148	63
APE / CVF 5-32T	1146	290	1436	300	275	210	78
APE / CVF 5-36T	1254	315	1569	300	275	210	80

Performance Curve - 1450rpm

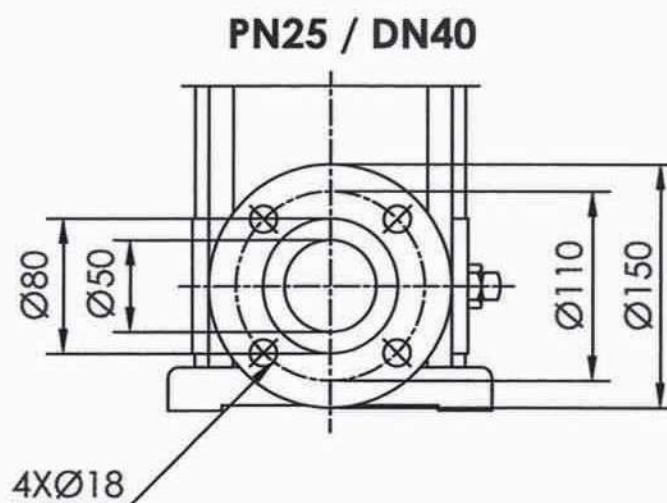
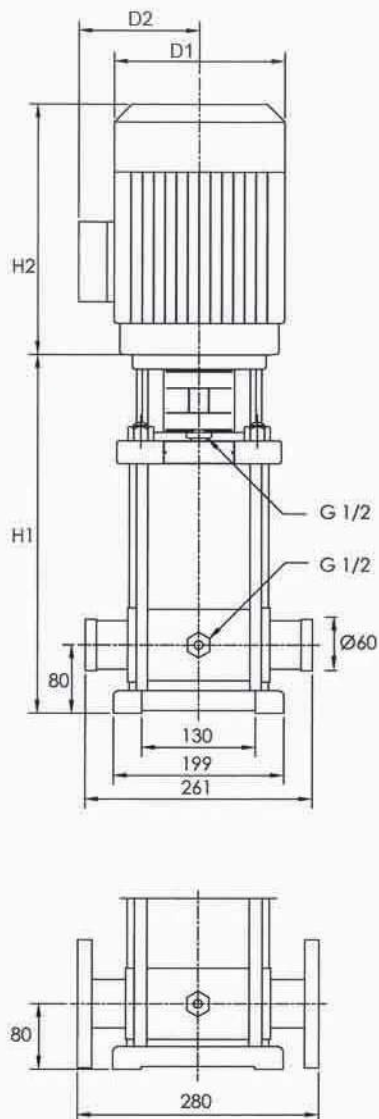
APE, CVF 10



Pump Type (1450 rpm)	Motor	Flow	0	1	2	3	4	5	6	7
	P2 [kW]	Q [m³/h]								
APE / CVF 10-2T	0.55	Head H [m]	6.0	5.8	5.5	5.1	4.5	4.0	3.3	2.5
APE / CVF 10-3T	0.55		8.5	8.3	8.0	7.6	7.0	6.3	5.3	4.0
APE / CVF 10-4T	0.55		11.0	10.8	10.5	10.0	9.3	8.0	6.8	5.0
APE / CVF 10-5T	0.55		13.5	13.3	12.8	12.0	11.0	9.8	8.0	6.0
APE / CVF 10-6T	0.55		15.8	15.5	15.3	14.5	13.3	11.5	9.5	7.0
APE / CVF 10-7T	0.55		18.5	18.3	17.8	16.8	15.3	13.5	10.8	8.0
APE / CVF 10-8T	0.55		21.0	20.8	20.3	19.3	17.8	15.5	12.8	9.3
APE / CVF 10-9T	0.55		23.5	23.3	22.8	21.8	20.3	17.8	14.8	10.5
APE / CVF 10-10T	0.55		26.3	26.0	25.5	24.5	22.8	20.3	16.8	11.8
APE / CVF 10-12T	0.55		31.0	30.8	30.3	29.3	27.0	23.8	19.5	13.8
APE / CVF 10-14T	0.75		36.0	35.8	35.3	33.8	31.1	27.5	22.5	15.8
APE / CVF 10-16T	0.75		41.0	40.8	40.1	38.5	35.8	31.3	25.5	17.8
APE / CVF 10-18T	1.1		46.0	45.8	44.8	43.1	40.3	36.0	29.5	20.5
APE / CVF 10-20T	1.1		51.0	50.5	49.5	47.8	45.0	40.0	33.3	23.3

Dimensions and Weights - 1450rpm

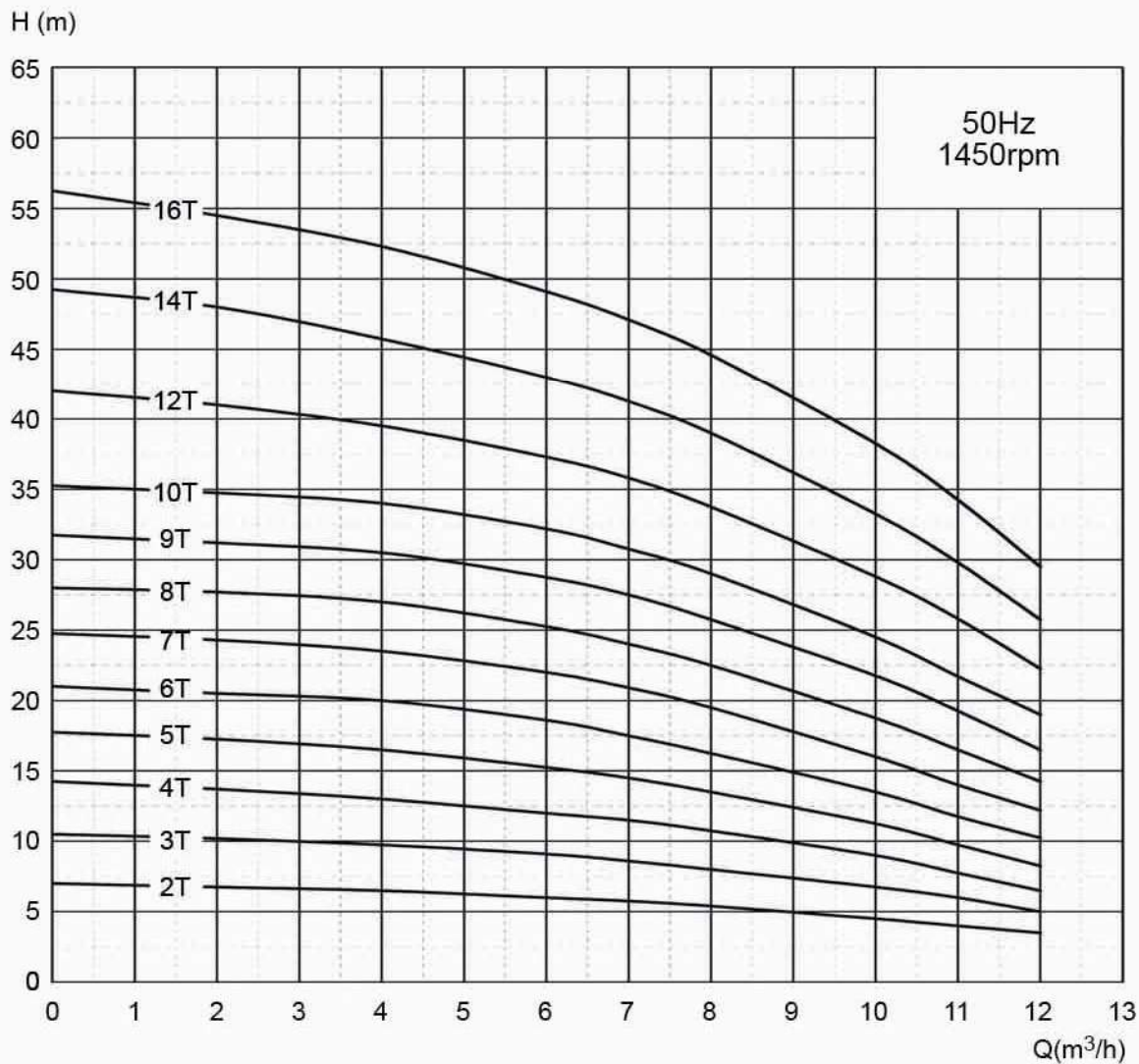
APE, CVF 10



Pump Type (1450rpm)	Motor	Dimensions [mm]				Net Weight [kg]
	P2	DIN Flange		D1	D2	DIN Flange
	[kW]	H1	H1+H2			
APE / CVF 10-2T	0.55	350	600	157	115	45
APE / CVF 10-3T	0.55	380	630	157	115	45
APE / CVF 10-4T	0.55	420	670	157	115	45
APE / CVF 10-5T	0.55	450	700	157	115	46
APE / CVF 10-6T	0.55	480	730	157	115	46
APE / CVF 10-7T	0.55	520	770	157	115	46
APE / CVF 10-8T	0.55	550	800	157	115	46
APE / CVF 10-9T	0.55	590	840	157	115	47
APE / CVF 10-10T	0.55	610	860	157	115	47
APE / CVF 10-12T	0.55	670	920	157	115	50
APE / CVF 10-14T	0.75	750	1050	157	115	52
APE / CVF 10-16T	0.75	810	1110	157	115	53
APE / CVF 10-18T	1.1	870	1175	185	142	56
APE / CVF 10-20T	1.1	930	1235	185	142	56

Performance Curve - 1450rpm

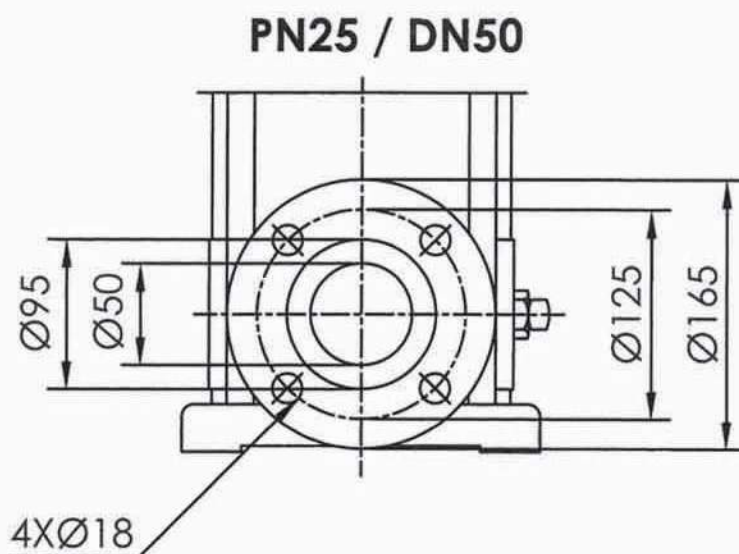
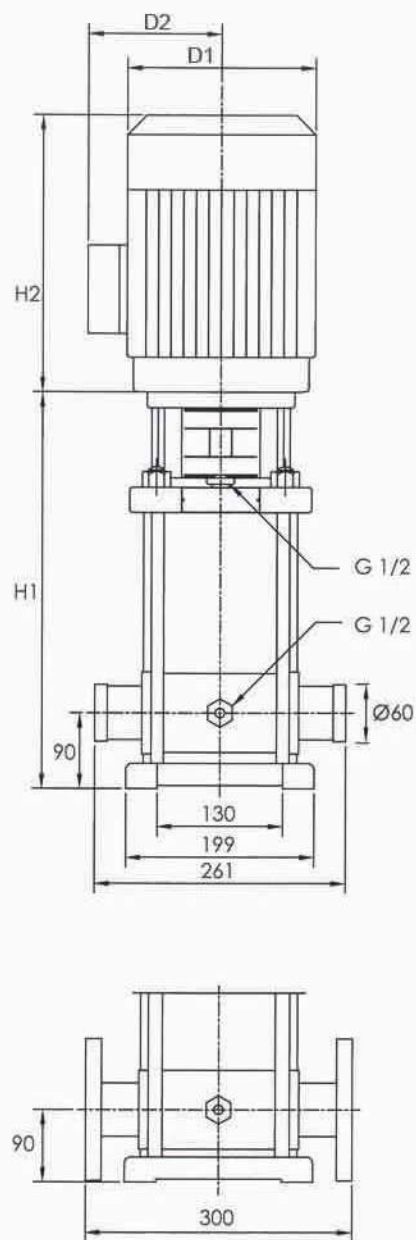
APE, CVF 15



Pump Type (1450 rpm)	Motor	Flow	0	2	4	6	7	8	10	11	12
	P2 [kW]	Q [m³/h]									
APE / CVF 15-2T	0.55	Head H [m]	7.0	6.8	6.5	6.0	5.8	5.4	4.5	4.0	3.5
APE / CVF 15-3T	0.55		10.5	10.2	9.8	9.1	8.6	8.0	6.8	6.0	5.0
APE / CVF 15-4T	0.55		14.3	13.7	13.0	12.0	11.5	10.8	9.0	7.8	6.5
APE / CVF 15-5T	0.75		17.8	17.3	16.5	15.3	14.5	13.5	11.3	9.8	8.3
APE / CVF 15-6T	0.75		21.0	20.5	20.0	18.6	17.5	16.3	13.5	11.8	10.3
APE / CVF 15-7T	1.1		24.8	24.3	23.5	22.0	20.9	19.5	16.0	14.0	12.2
APE / CVF 15-8T	1.1		28.0	27.7	27.0	25.3	24.0	22.5	18.8	16.5	14.3
APE / CVF 15-9T	1.5		31.8	31.2	30.5	28.8	27.5	25.8	21.8	19.3	16.5
APE / CVF 15-10T	1.5		35.3	34.8	34.0	32.2	30.8	29.0	24.5	21.7	19.0
APE / CVF 15-12T	1.5		42.0	41.0	39.5	37.3	35.8	33.8	28.8	25.8	22.3
APE / CVF 15-14T	2.2		49.3	48.0	45.8	43.0	41.3	39.0	33.3	29.8	25.8
APE / CVF 15-16T	2.2		56.3	54.5	52.3	49.1	47.1	44.6	38.3	34.3	29.5

Dimensions and Weights - 1450rpm

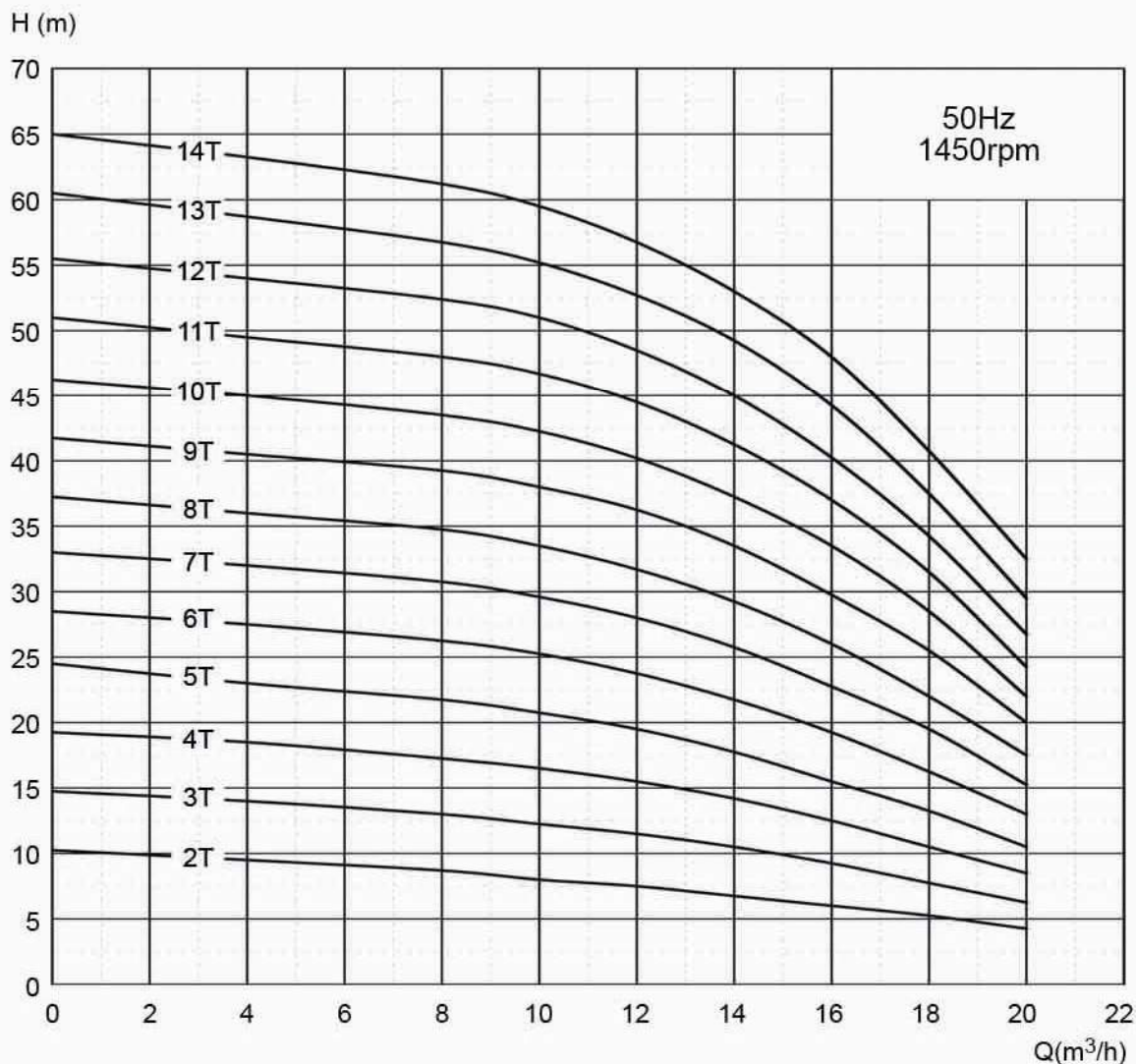
APE, CVF 15



Pump Type (1450rpm)	Motor	Dimensions [mm]				Net Weight [kg]
	P2	DIN Flange		D1	D2	DIN Flange
	[kW]	H1	H1+H2			
APE / CVF 15-2T	0.55	400	650	157	115	46
APE / CVF 15-3T	0.55	455	705	157	115	46
APE / CVF 15-4T	0.55	500	750	157	115	48
APE / CVF 15-5T	0.75	565	865	157	115	50
APE / CVF 15-6T	0.75	610	910	157	115	53
APE / CVF 15-7T	1.1	655	960	185	142	55
APE / CVF 15-8T	1.1	700	1005	185	142	56
APE / CVF 15-9T	1.5	810	1140	185	142	60
APE / CVF 15-10T	1.5	820	1150	185	142	62
APE / CVF 15-12T	1.5	910	1240	185	142	66
APE / CVF 15-14T	2.2	1000	1385	206	155	76
APE / CVF 15-16T	2.2	1090	1475	206	155	80

Performance Curve - 1450rpm

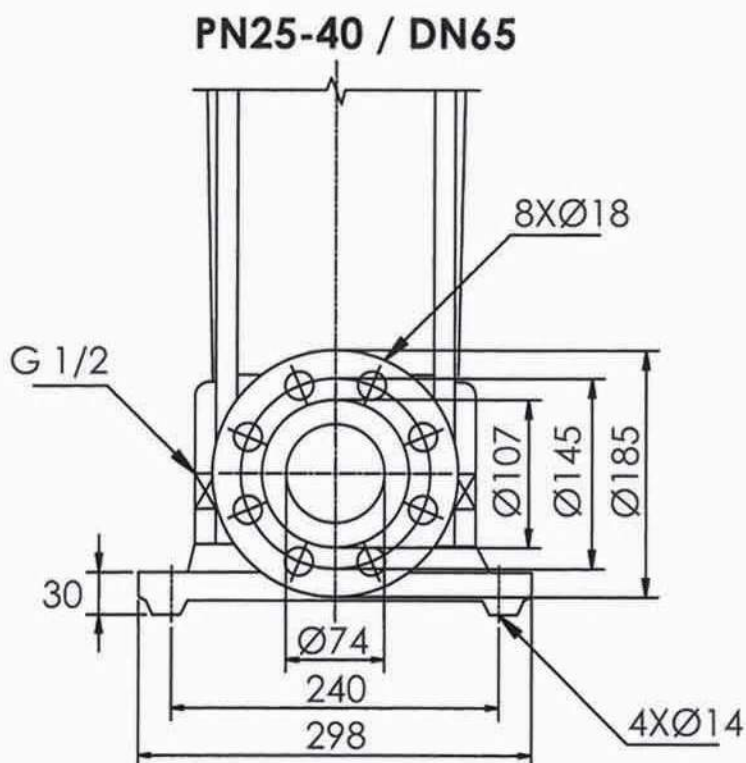
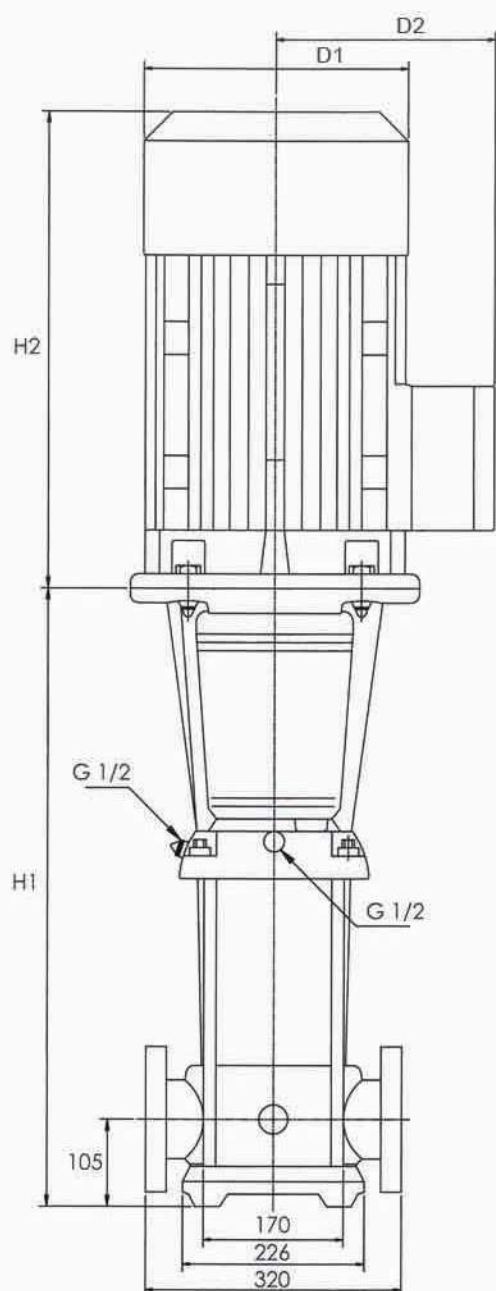
APE, CVF 32



Pump Type (1450 rpm)	Motor P2	Flow Q	0	4	8	10	12	14	16	18	20
	[kW]	[m³/h]									
APE / CVF 32-2T	1.1	Head H [m]	10.3	9.5	8.7	8.0	7.5	6.8	6.0	5.3	4.3
APE / CVF 32-3T	1.1		14.8	14.0	13.0	12.3	11.5	10.5	9.3	7.8	6.3
APE / CVF 32-4T	1.1		19.3	18.5	17.3	16.5	15.5	14.2	12.5	10.5	8.5
APE / CVF 32-5T	1.5		24.5	23.0	21.8	20.8	19.5	17.8	15.5	13.3	10.5
APE / CVF 32-6T	1.5		28.5	27.5	26.3	25.3	23.8	21.8	19.3	16.3	13.0
APE / CVF 32-7T	2.2		33.0	32.0	30.8	29.6	28.0	25.8	22.8	19.5	15.3
APE / CVF 32-8T	2.2		37.3	36.0	34.8	33.5	31.7	29.3	26.0	22.0	17.5
APE / CVF 32-9T	2.2		41.8	40.5	39.3	38.0	36.3	33.5	29.8	25.5	20.0
APE / CVF 32-10T	3		46.3	45.0	43.5	42.3	40.2	37.3	33.5	28.5	22.0
APE / CVF 32-11T	3		51.0	49.5	48.0	46.7	44.5	41.3	37.0	31.5	24.3
APE / CVF 32-12T	3		55.5	54.0	52.4	51.0	48.5	45.0	40.3	34.3	26.8
APE / CVF 32-13T	4		60.5	58.7	56.8	55.2	52.7	49.3	44.3	37.5	29.5
APE / CVF 32-14T	4		65.0	63.3	61.2	59.5	56.8	53.0	48.0	40.8	32.5

Dimensions and Weights - 1450rpm

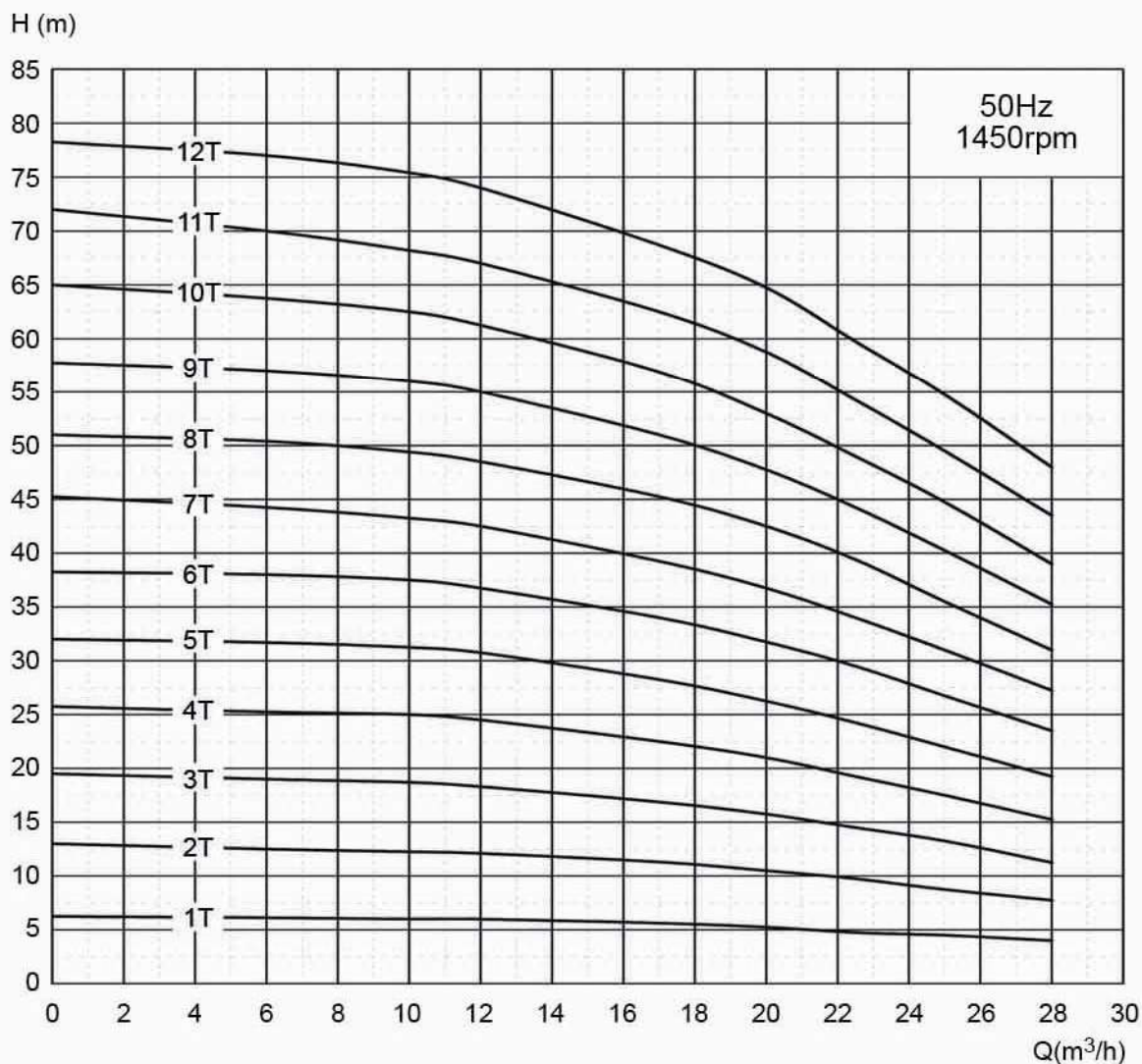
APE, CVF 32



Pump Type (1450rpm)	Motor	Dimensions [mm]				Net Weight [kg]
	P2	DIN Flange		D1	D2	DIN Flange
	[kW]	H1	H1+H2			
APE / CVF 32-2T	1.1	575	880	185	142	92
APE / CVF 32-3T	1.1	645	950	185	142	93
APE / CVF 32-4T	1.1	715	1020	185	142	93
APE / CVF 32-5T	1.5	890	1220	185	142	97
APE / CVF 32-6T	1.5	960	1290	185	142	98
APE / CVF 32-7T	2.2	1030	1415	206	155	106
APE / CVF 32-8T	2.2	1100	1485	206	155	107
APE / CVF 32-9T	2.2	1170	1555	206	155	107
APE / CVF 32-10T	3	1240	1630	220	155	115
APE / CVF 32-11T	3	1310	1700	220	155	117
APE / CVF 32-12T	3	1380	1770	220	155	119
APE / CVF 32-13T	4	1450	1860	250	168	132
APE / CVF 32-14T	4	1520	1930	250	168	132

Performance Curve - 1450rpm

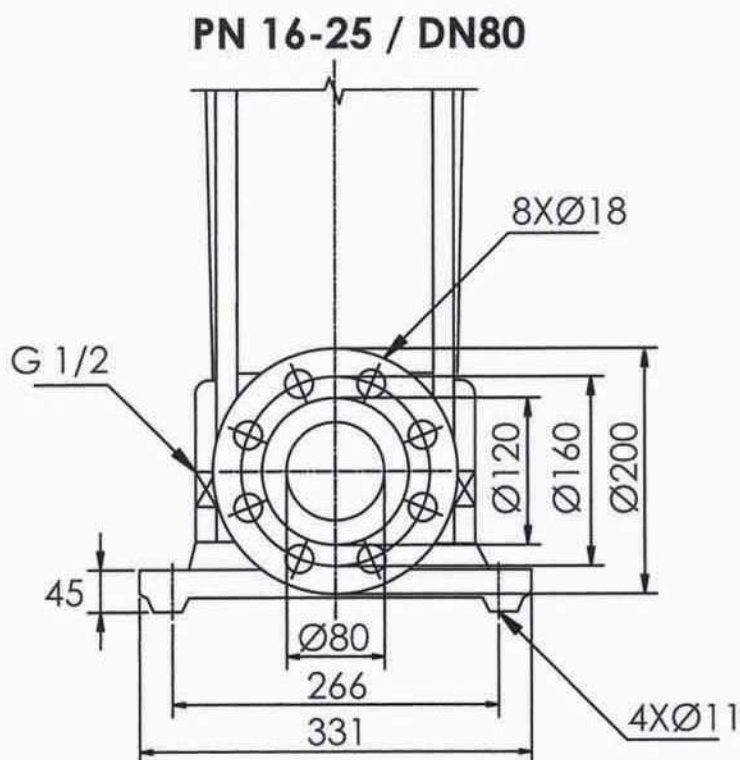
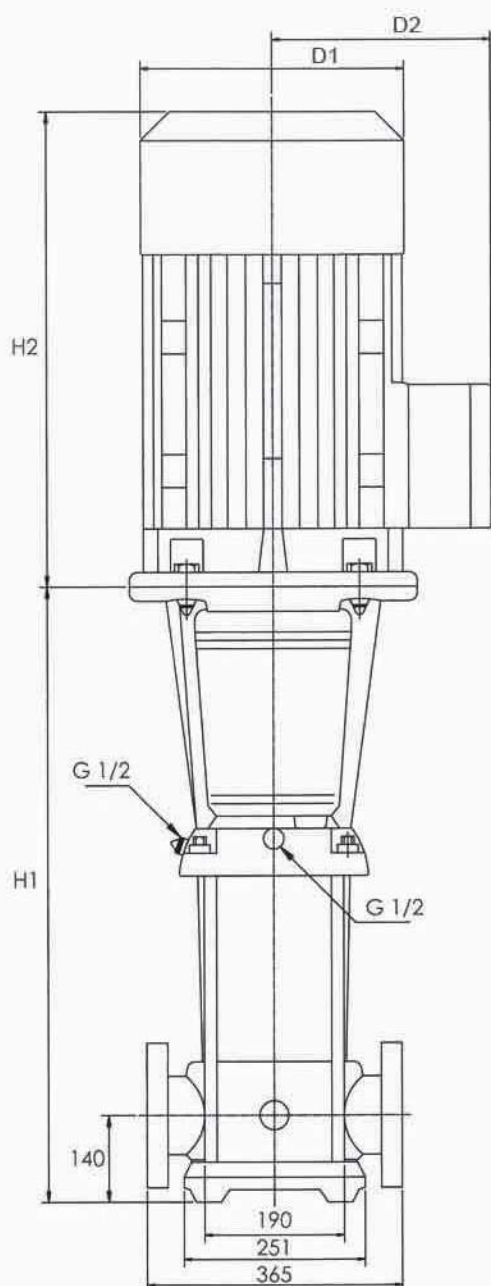
APE, CVF 45



Pump Type (1450 rpm)	Motor	Flow	0	6	10	12	17	20	22.5	25	28
	P2	Q									
	[kW]	[m³/h]									
APE / CVF 45-1T	1.1	Head H [m]	6.3	6.1	6.0	6.0	5.6	5.3	4.8	4.5	4.0
APE / CVF 45-2T	1.1		13.0	12.5	12.3	12.1	11.3	10.5	9.8	8.8	7.8
APE / CVF 45-3T	1.5		19.5	19.0	18.7	18.3	16.9	15.8	14.5	13.3	11.3
APE / CVF 45-4T	2.2		25.8	25.3	25.0	24.5	22.5	21.0	19.3	17.5	15.3
APE / CVF 45-5T	3		32.0	31.7	31.3	30.8	28.3	26.3	24.3	22.0	19.3
APE / CVF 45-6T	3		38.3	38.0	37.5	36.8	34.0	31.8	29.5	26.8	23.5
APE / CVF 45-7T	4		45.3	44.3	43.3	42.5	39.3	36.8	34.0	31.0	27.3
APE / CVF 45-8T	4		51.0	50.4	49.4	48.5	45.3	42.5	39.4	35.5	31.0
APE / CVF 45-9T	5.5		57.8	57.0	56.0	55.0	51.0	47.8	44.3	40.3	35.3
APE / CVF 45-10T	5.5		65.0	63.8	62.5	61.3	56.9	53.0	49.0	44.8	39.0
APE / CVF 45-11T	7.5		72.0	70.0	68.2	67.0	62.5	58.8	54.3	49.5	43.5
APE / CVF 45-12T	7.5		78.3	77.0	75.4	74.0	68.7	64.8	59.8	54.8	48.0

Dimensions and Weights - 1450rpm

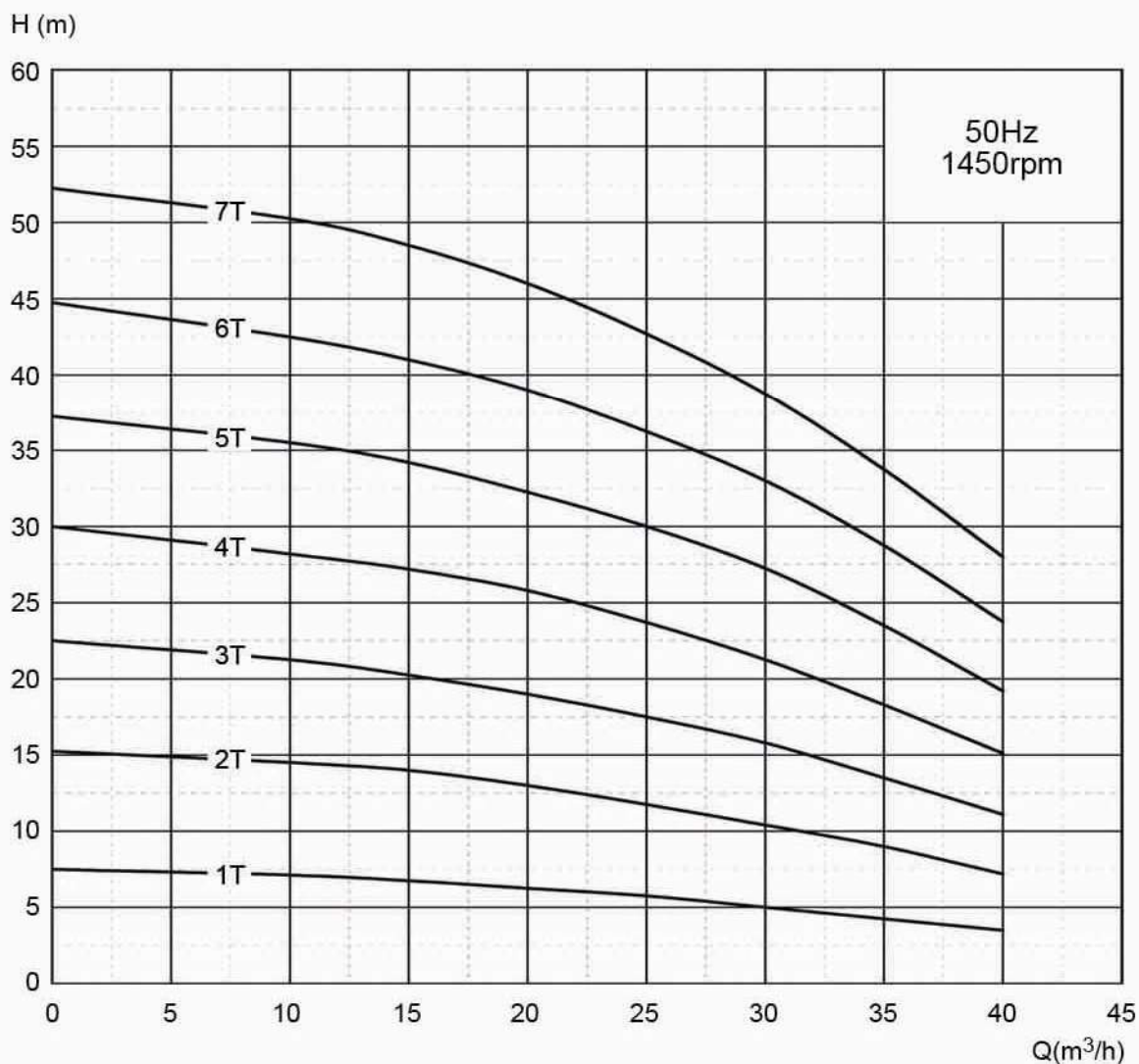
APE, CVF 45



Pump Type (1450rpm)	Motor	Dimensions [mm]				Net Weight [kg]
	P2	DIN Flange		D1	D2	DIN Flange
	[kW]	H1	H1+H2			
APE / CVF 45-1T	1.1	641	946	185	142	96
APE / CVF 45-2T	1.1	641	946	185	142	96
APE / CVF 45-3T	1.5	826	1156	185	142	98
APE / CVF 45-4T	2.2	910	1295	206	155	100
APE / CVF 45-5T	3	990	1375	220	155	106
APE / CVF 45-6T	3	1066	1451	220	155	106
APE / CVF 45-7T	4	1150	1560	250	168	115
APE / CVF 45-8T	4	1230	1640	250	168	115
APE / CVF 45-9T	5.5	1310	1765	275	175	158
APE / CVF 45-10T	5.5	1390	1845	275	175	160
APE / CVF 45-11T	7.5	1470	1965	275	175	165
APE / CVF 45-12T	7.5	1550	2045	275	175	166

Performance Curve - 1450rpm

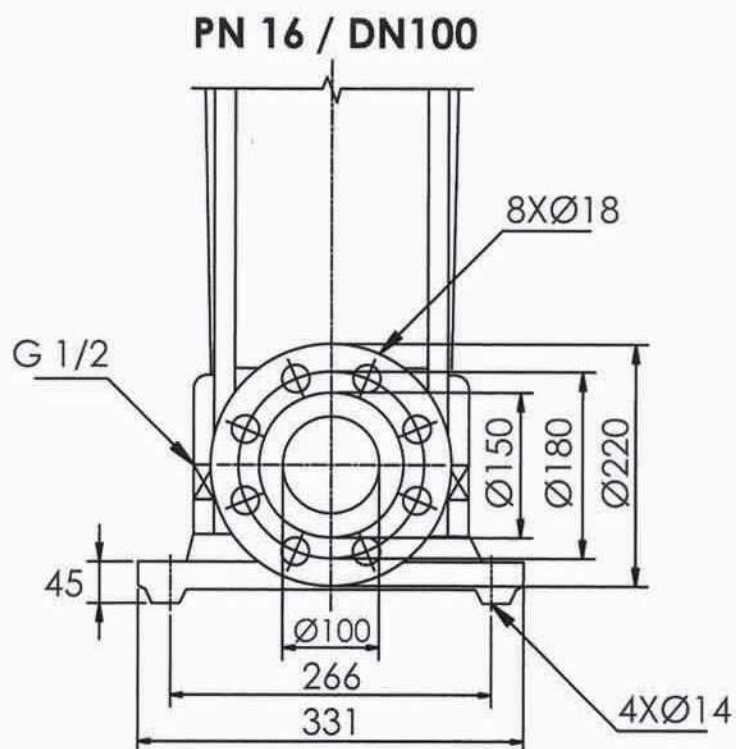
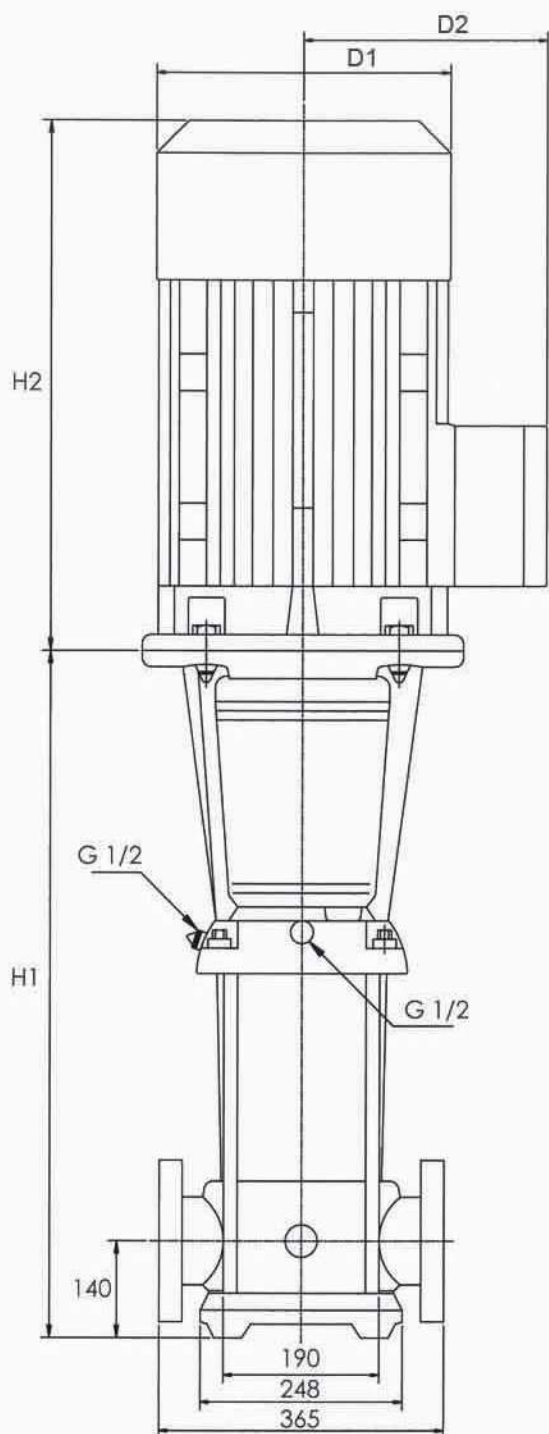
APE, CVF 64



Pump Type (1450 rpm)	Motor	Flow	0	10	15	20	25	30	35	40
	P2	Q								
	[kW]	[m³/h]								
APE / CVF 64-1T	1.1	Head H [m]	7.5	7.1	6.8	6.3	5.8	5.0	4.3	3.5
APE / CVF 64-2T	1.5		15.3	14.5	14.0	13.0	11.8	10.4	9.0	7.2
APE / CVF 64-3T	3		22.5	21.3	20.3	19.0	17.5	15.8	13.5	11.1
APE / CVF 64-4T	3		30.0	28.2	27.2	25.8	23.7	21.3	18.3	15.1
APE / CVF 64-5T	4		37.3	35.5	34.2	32.3	30.0	27.3	23.5	19.2
APE / CVF 64-6T	5.5		44.8	42.5	41.0	39.0	36.3	33.0	28.8	23.8
APE / CVF 64-7T	5.5		52.3	50.3	48.5	46.0	42.7	38.8	33.8	28.0

Dimensions and Weights - 1450rpm

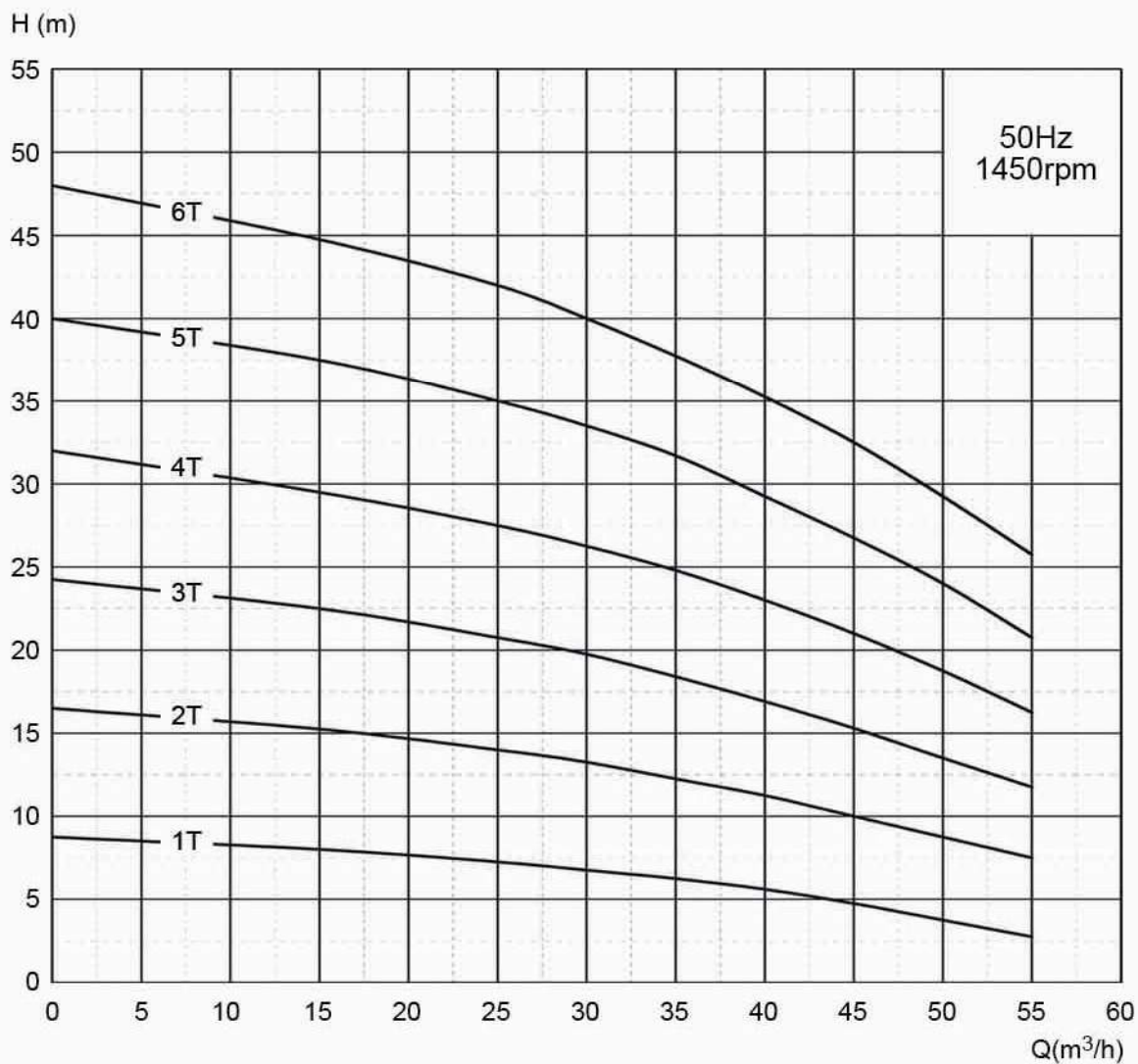
APE, CVF 64



Pump Type (1450rpm)	Motor	Dimensions [mm]				Net Weight [kg]
	P2	DIN Flange		D1	D2	DIN Flange
	[kW]	H1	H1+H2			
APE / CVF 64-1T	1.1	561	866	185	142	92
APE / CVF 64-2T	1.5	754	1085	185	142	94
APE / CVF 64-3T	3	836	1221	220	155	103
APE / CVF 64-4T	3	919	1304	220	155	116
APE / CVF 64-5T	4	1001	1411	250	168	130
APE / CVF 64-6T	5.5	1084	1539	275	175	238
APE / CVF 64-7T	5.5	1166	1621	275	175	240

Performance Curve - 1450rpm

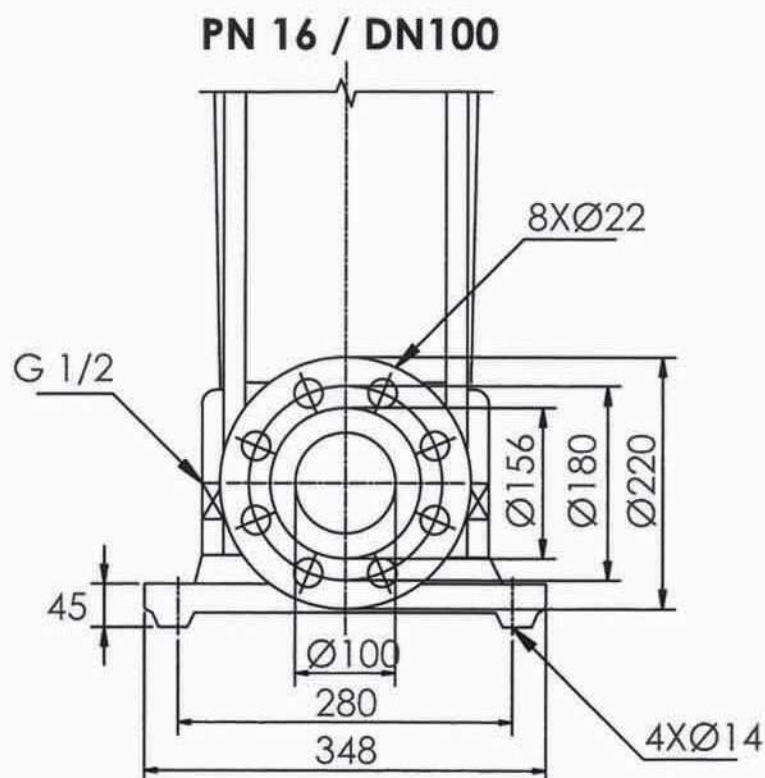
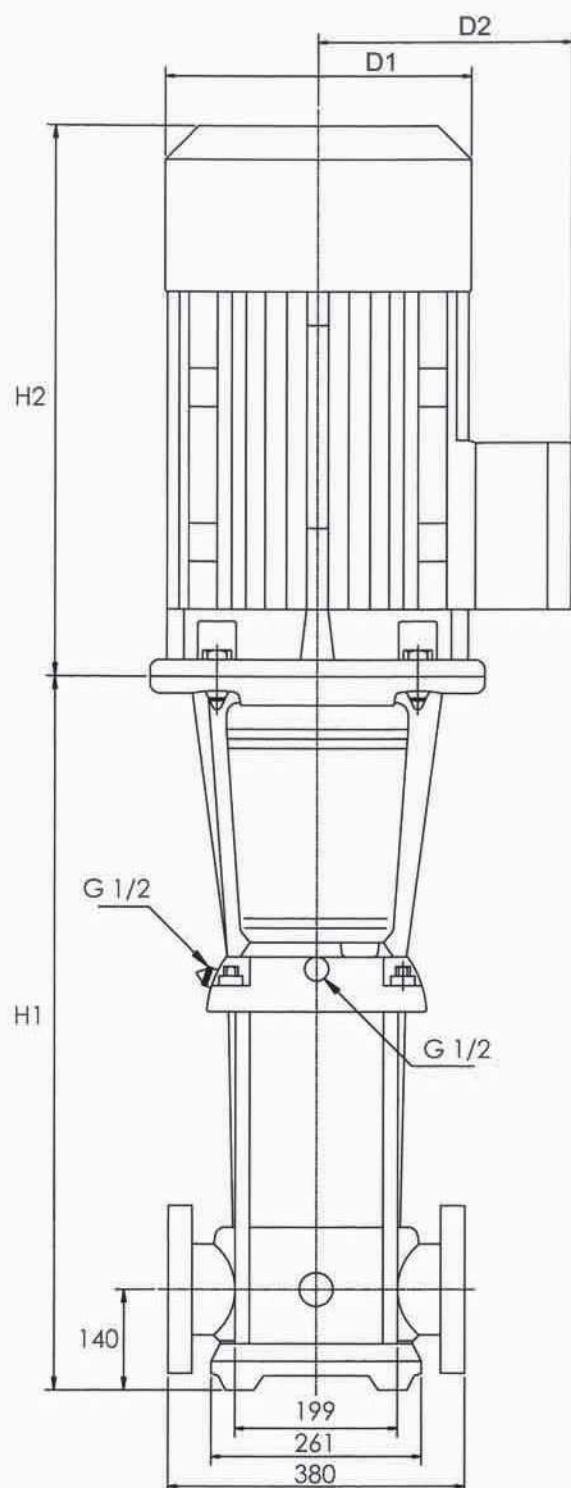
APE, CVF 90



Pump Type (1450 rpm)	Motor	Flow	0	15	25	30	35	40	45	50	55
	P2 [kW]	Q [m³/h]									
APE / CVF 90-1T	1.1	Head H [m]	8.8	8.0	7.3	6.8	6.3	5.6	4.8	3.8	2.8
APE / CVF 90-2T	2.2		16.5	15.3	14.0	13.3	12.3	11.3	10.0	8.8	7.5
APE / CVF 90-3T	3		24.3	22.5	20.8	19.8	18.4	16.9	15.3	13.5	11.8
APE / CVF 90-4T	4		32.0	29.5	27.5	26.3	24.8	23.0	21.0	18.8	16.3
APE / CVF 90-5T	5.5		40.0	37.5	35.0	33.5	31.7	29.3	26.8	24.0	20.8
APE / CVF 90-6T	5.5		48.0	44.8	42.0	40.0	37.8	35.3	32.5	29.3	25.8

Dimensions and Weights - 1450rpm

APE, CVF 90



Pump Type (1450rpm)	Motor	Dimensions [mm]				Net Weight [kg]
	P2	DIN Flange		D1	D2	DIN Flange
	[kW]	H1	H1+H2			
APE / CVF 90-1T	1.1	571	876	185	142	95
APE / CVF 90-2T	2.2	773	1158	206	155	98
APE / CVF 90-3T	3	865	1250	220	155	100
APE / CVF 90-4T	4	957	1367	250	168	110
APE / CVF 90-5T	5.5	1049	1504	275	175	128
APE / CVF 90-6T	5.5	1141	1596	275	175	130