

Apemac

Tecnología de la bomba de agua



Water 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

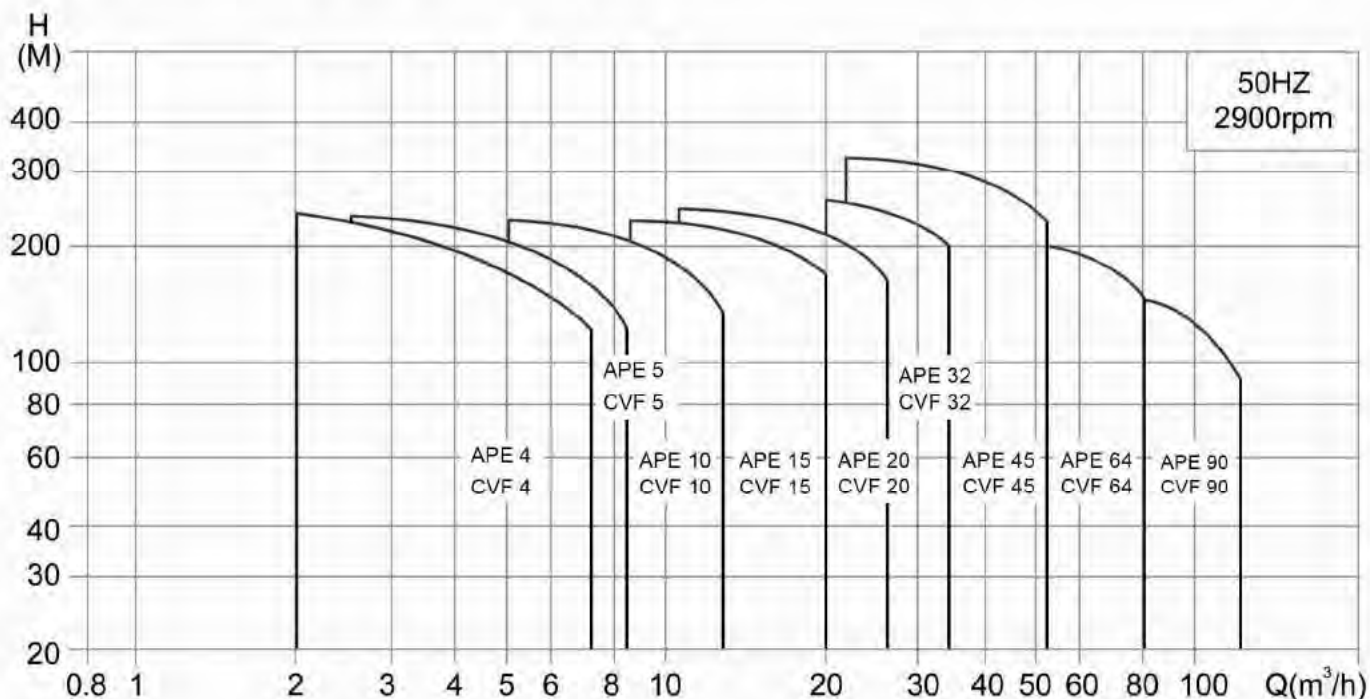
- *Water supply and pressure boosting for buildings, water stations, water supply network*
- *Irrigation and agriculture*
- *Washing and cleaning systems*
- *Fire fighting systems*
- *Process water systems*
- *Water treatment systems*
- *Heating, ventilation and air-conditioning*
- *RO water and desalination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



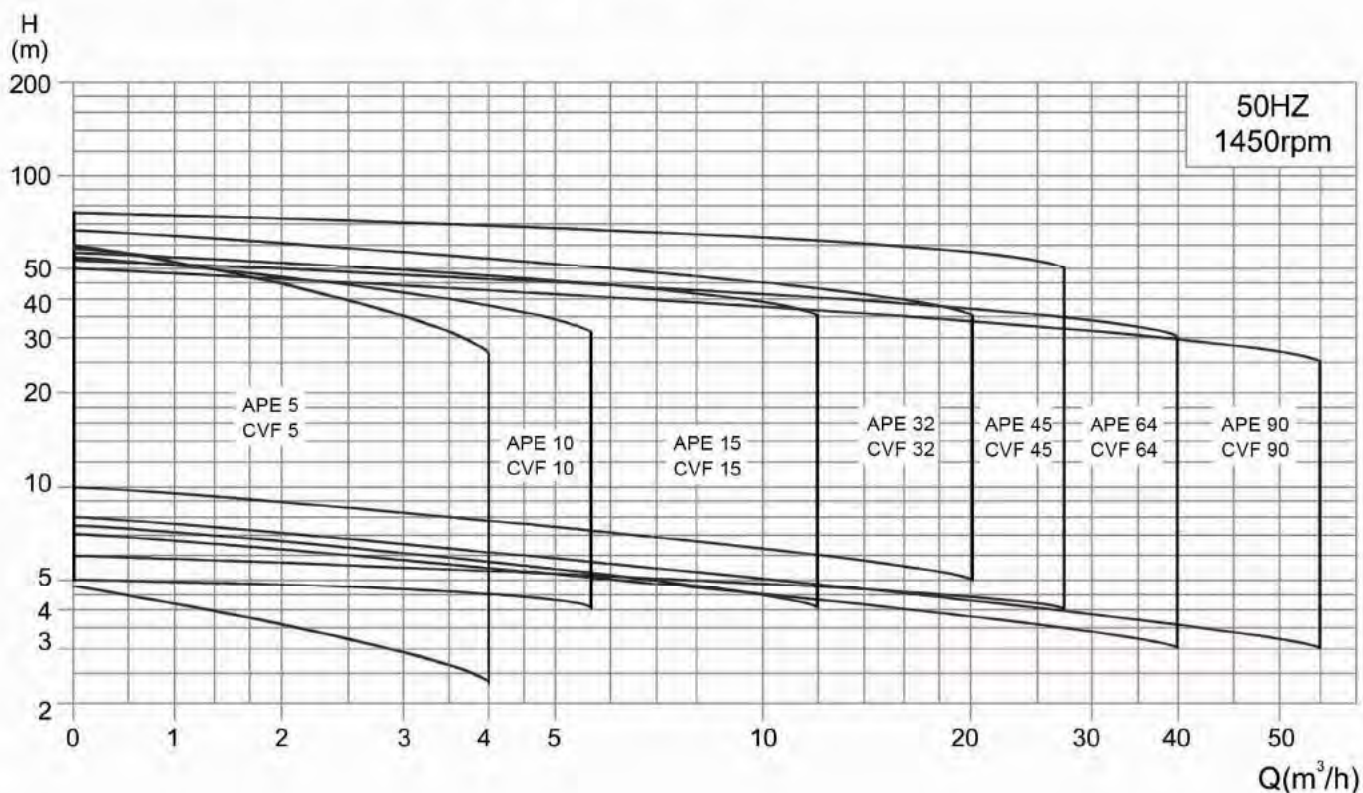
The use of mechanical seal made maintenance work easier.

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		B5	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			--	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
APE / CVF 5		2 - 36	16 - 25 bar	18 - 36	15 bar
APE / CVF 10		1 - 22	16 - 25 bar	2 - 16	10 bar
APE / CVF 15		1 - 17	16 - 25 bar	18 - 36	15 bar
APE / CVF 20		1 - 17	16 - 25 bar	1 - 6	8 bar
APE / CVF 32		1 - 7	16 bar	7 - 22	10 bar
APE / CVF 45		8 - 12	25 bar	1 - 3	8 bar
APE / CVF 64		13 - 14	30 bar	4 - 17	10 bar
APE / CVF 5		1 - 5	16 bar	1 - 3	8 bar
APE / CVF 10		6 - 11	30 bar	4 - 17	10 bar
APE / CVF 15		12 - 13	33 bar	1 - 4	4 bar
APE / CVF 32		1 - 5	16 bar	5 - 10	10 bar
APE / CVF 45		6 - 8	25 bar	11 - 14	15 bar
APE / CVF 64		2 - 36	24 bar	1 - 2	4 bar
APE / CVF 90		2 - 20	16 bar	3 - 5	10 bar
APE / CVF 10	1450	2 - 16	16 bar	6 - 13	15 bar
APE / CVF 15		2 - 14	16 bar	1 - 2	4 bar
APE / CVF 32		1 - 13	16 bar	2 - 4	10 bar
APE / CVF 45		1 - 8	16 bar	4 - 8	15 bar
APE / CVF 64		1 - 6	16 bar	5 - 16	10 bar
APE / CVF 90				2 - 20	4 bar
				2 - 16	4 bar

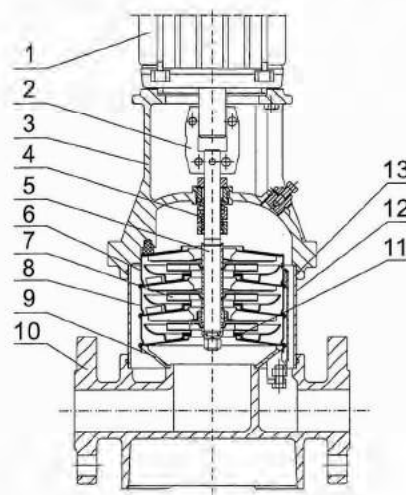
Construction

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

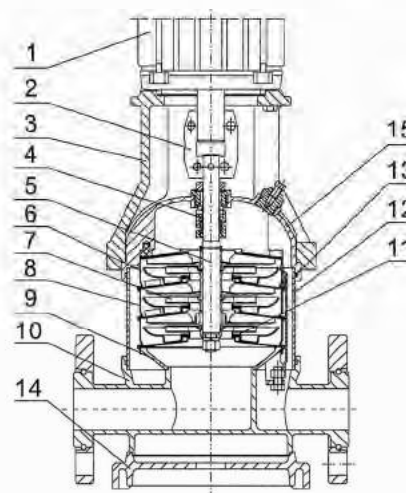


CVF 4, 5, 10, 15, 20, 32, 45, 64, 90

Material CVF

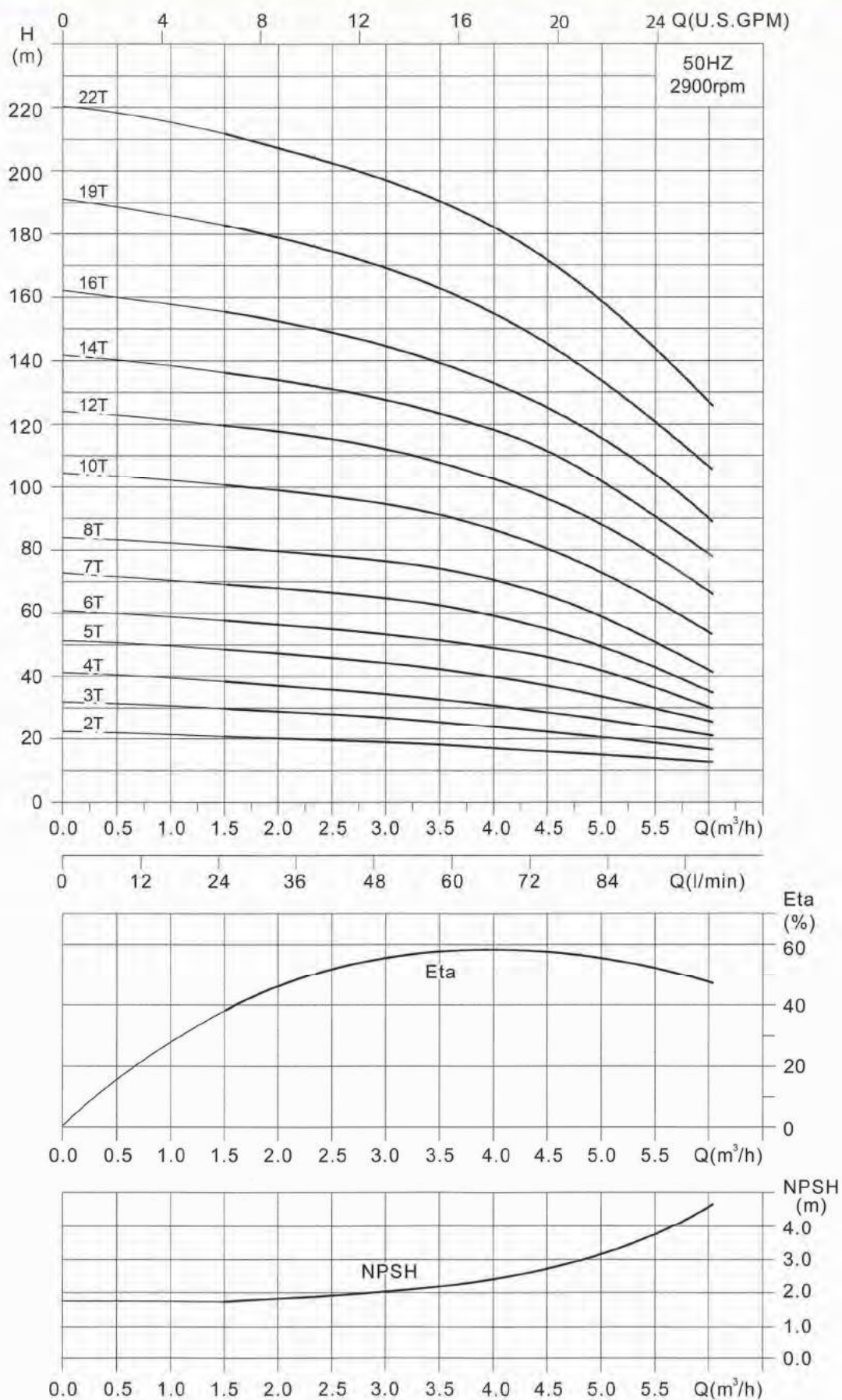
No.	Description	Material	EN/DIN	AISI/ASTM
1	Motor	--	--	--
2	Shaft Connector	--	--	--
3	Motor Support Frame	Cast Iron	EN-JL1030	ASTM25B
4	Mechanical Seal	Tungsten carbide/ Silicon carbide/ Viton/SUS316	--	--
5	Shaft	S.S.	1.4302	AISI316
6	Outlet	S.S.	1.4302	AISI316
7	Impeller	S.S.	1.4302	AISI316
8	Hydraulic 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



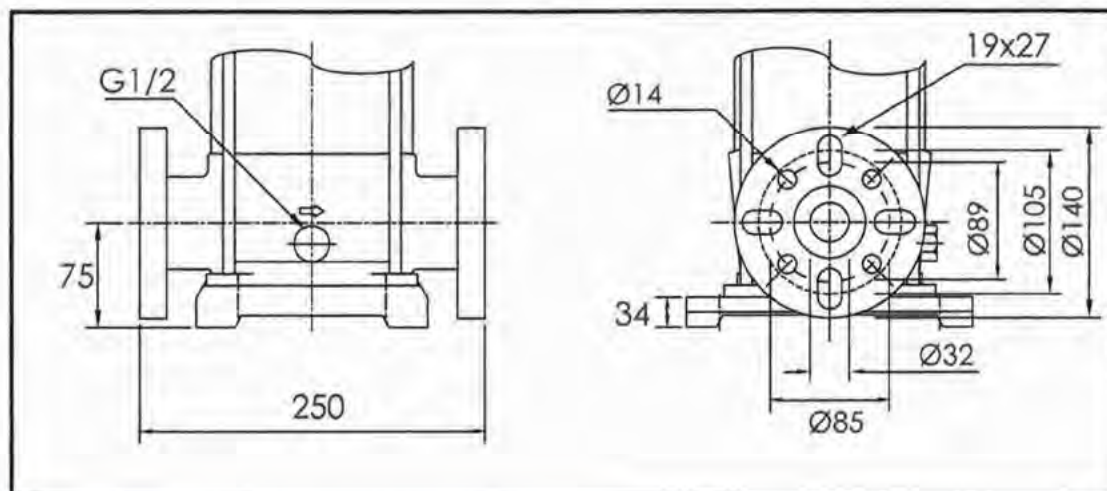
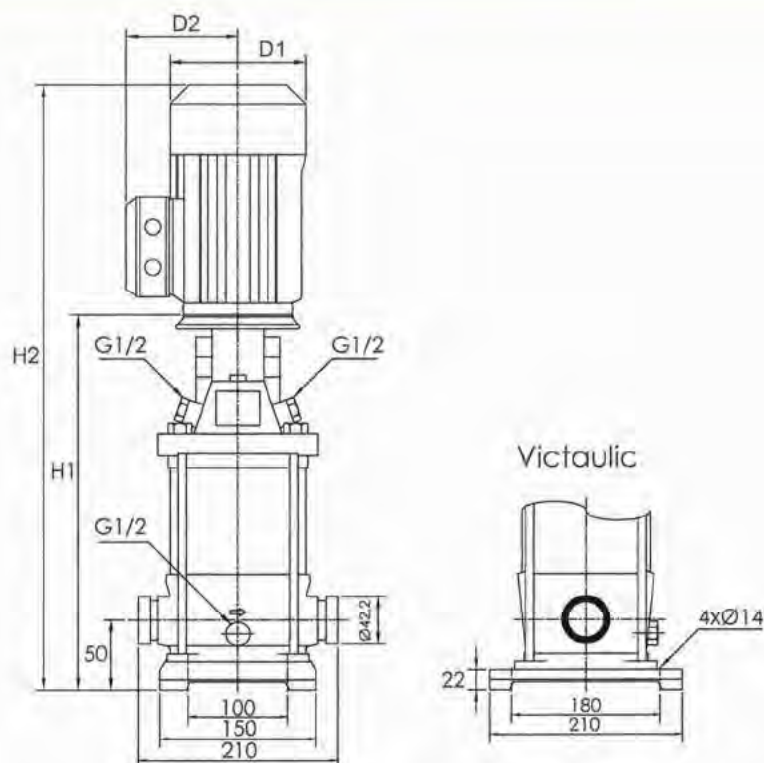
Performance Curve - 2900rpm

APE, CVF 4



Dimensions and Weights - 2900rpm

APE, CVF 4

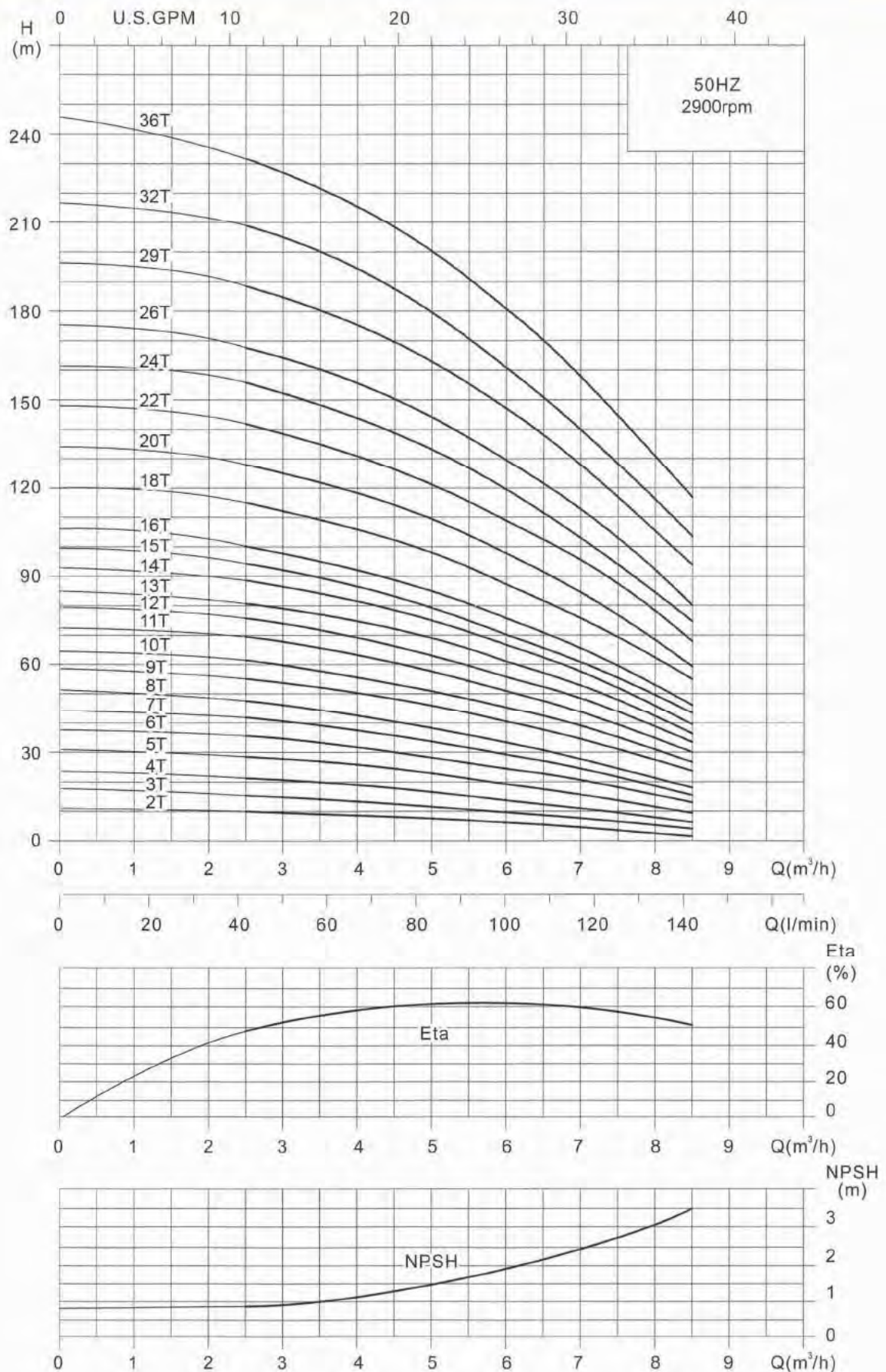


**Flange
(DIN-ANSI-JIS)
PN25/ DN25/32**

Pump Type (2900rpm)	Motor	Dimensions [mm]						Net Weight [kg]	
	P2	Victaulic		DIN Flange		D1	D2	Victaulic	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

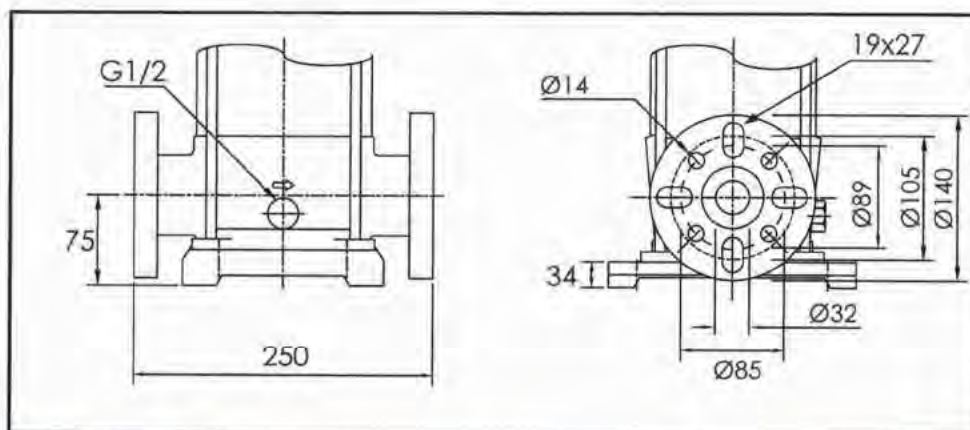
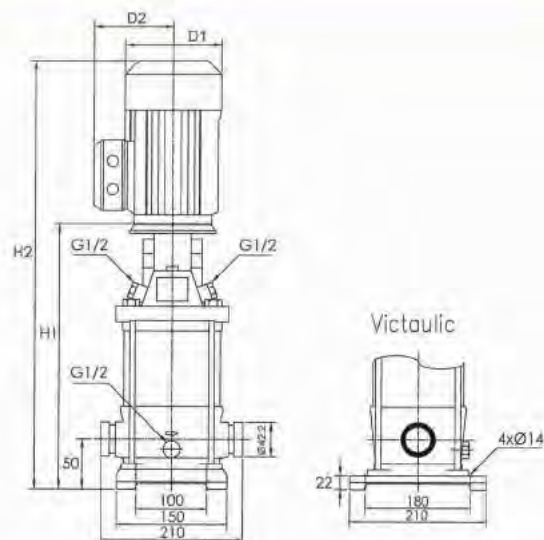
Performance Curve - 2900rpm

APE, CVF 5



Dimensions and Weights - 2900rpm

APE, CVF 5

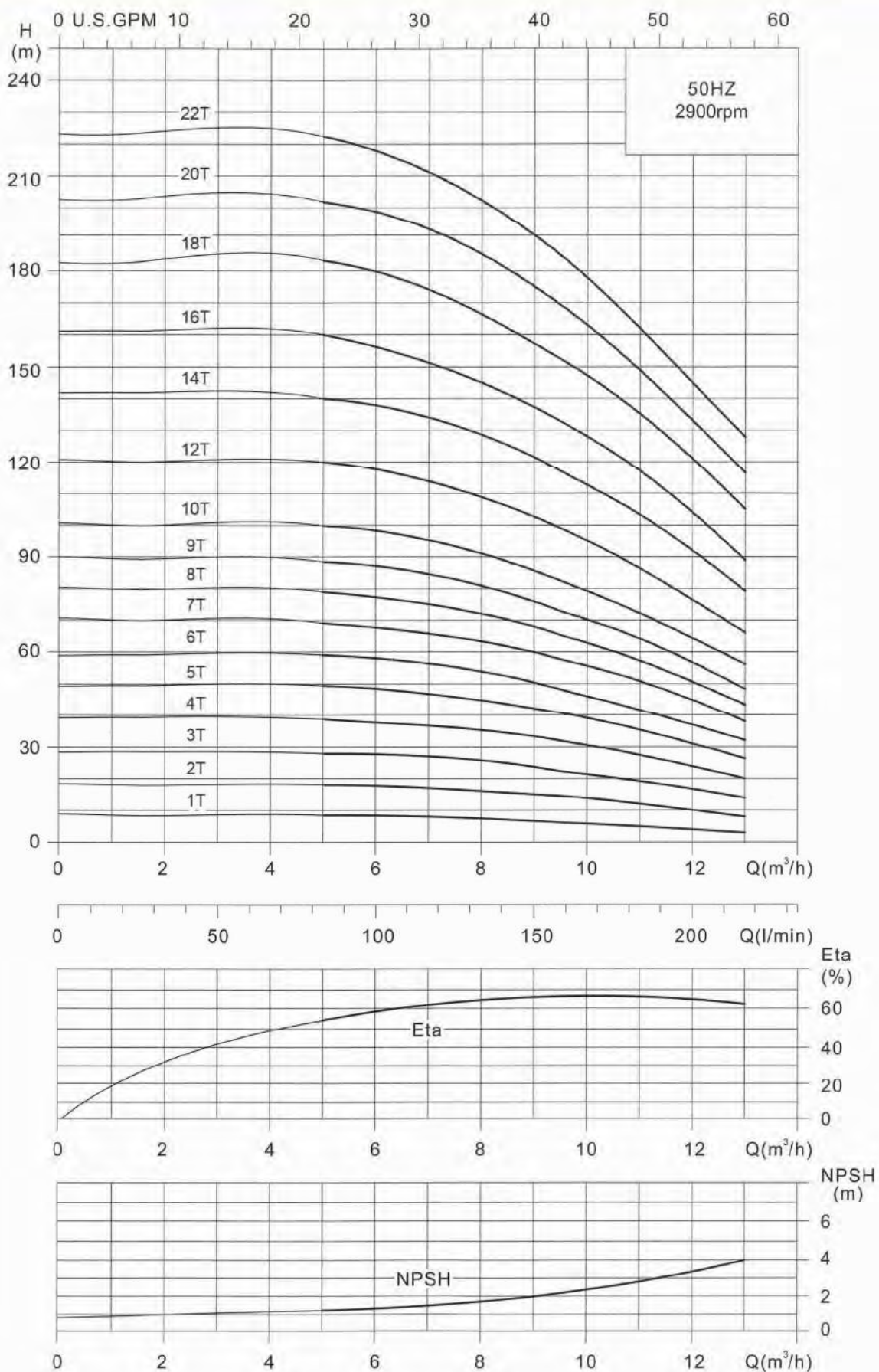


**Flange
(DIN-ANSI-JIS
PN25/ DN25/32)**

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

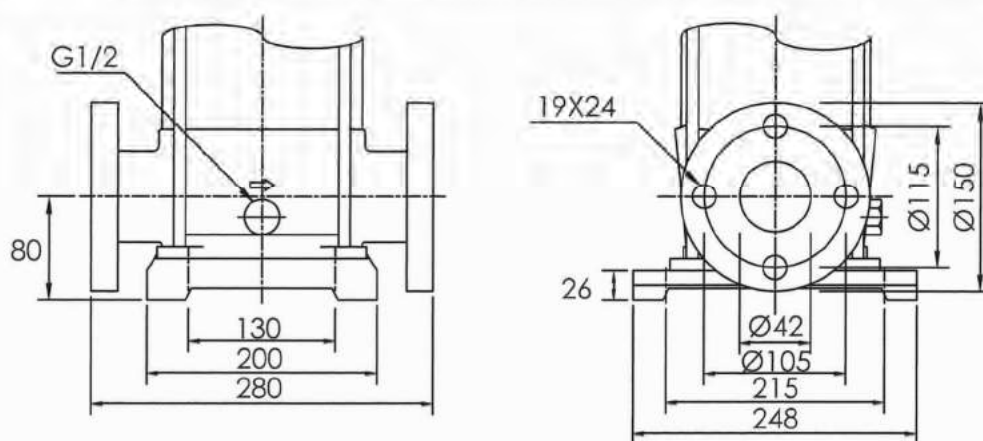
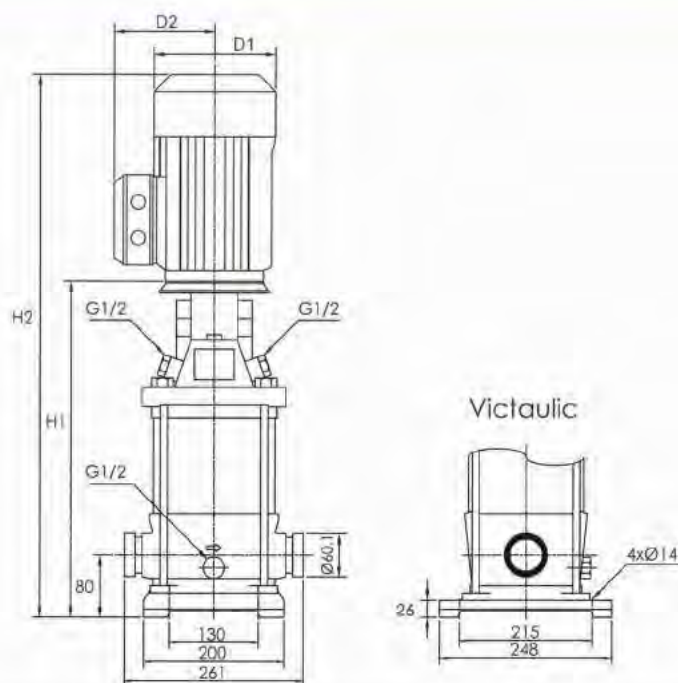
Performance Curve - 2900rpm

APE, CVF 10



Dimensions and Weights - 2900rpm

APE, CVF 10

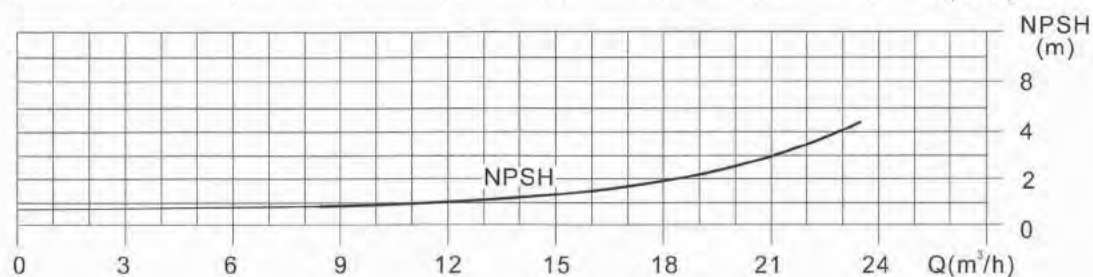
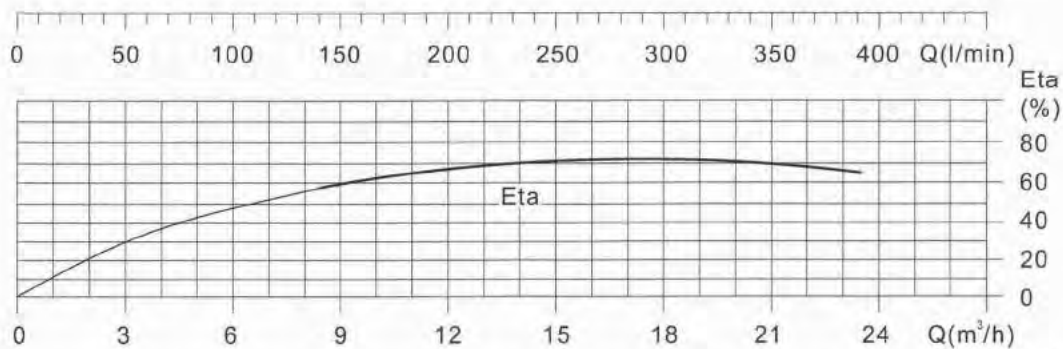
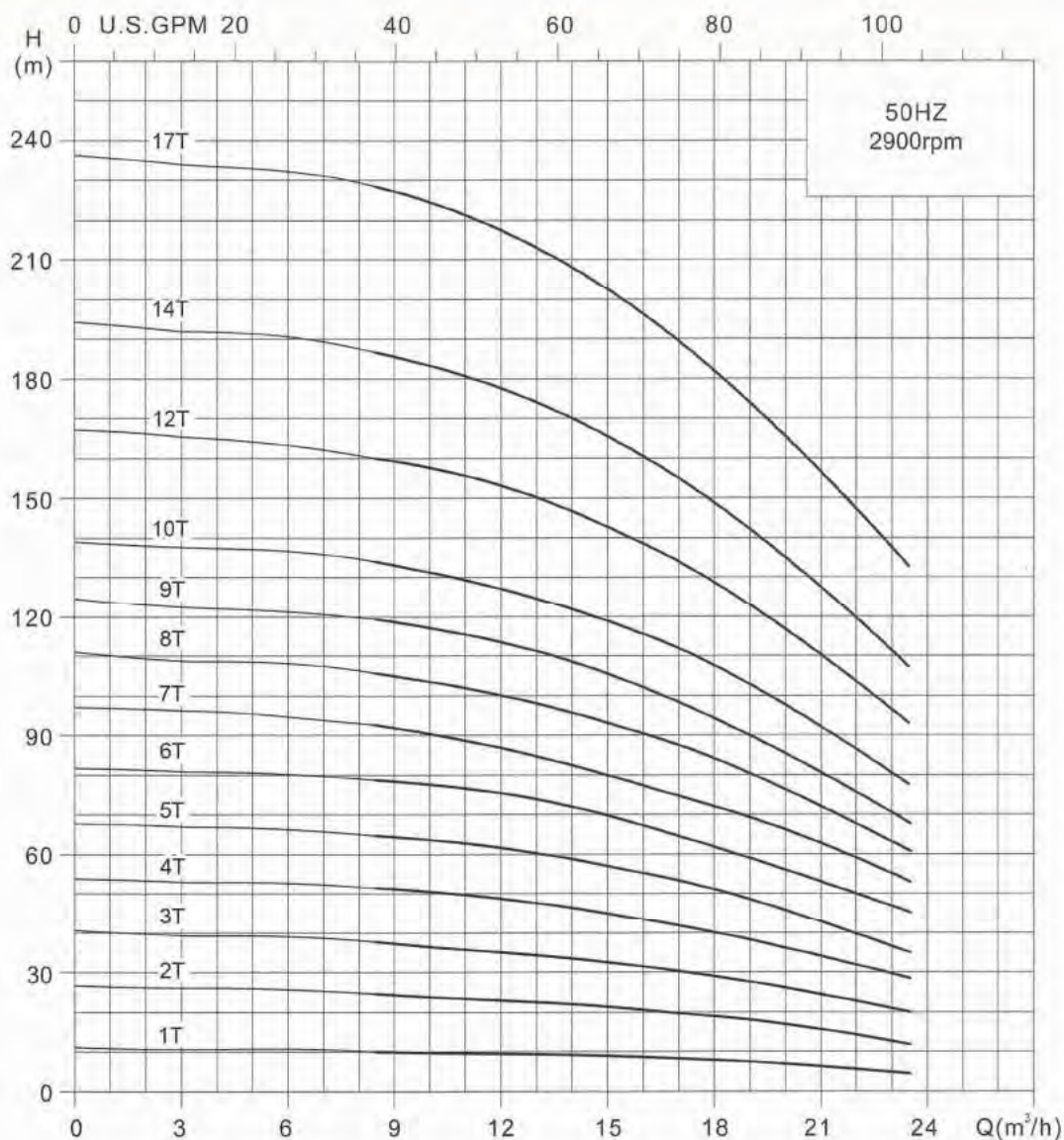


**Flange
(DIN-ANSI-JIS)
PN25/DN40**

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

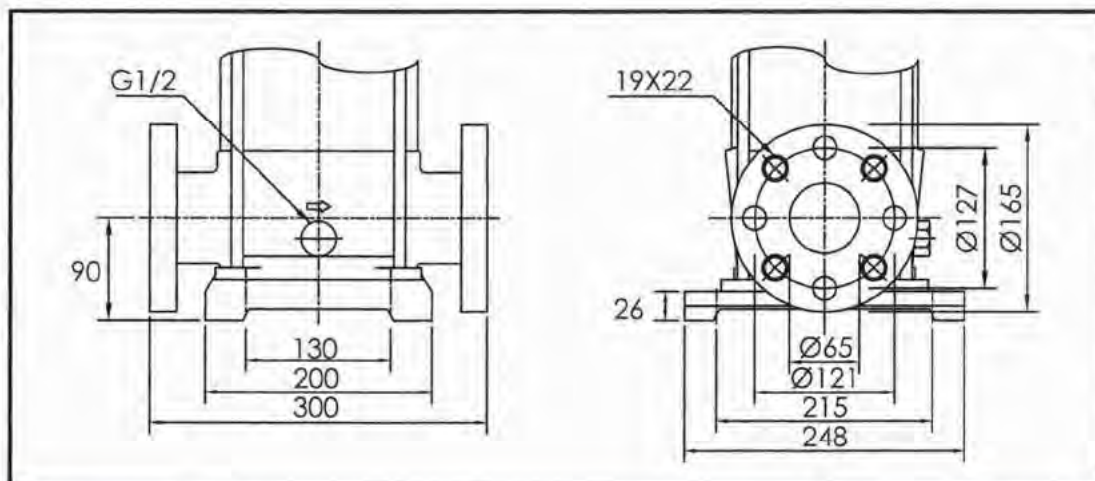
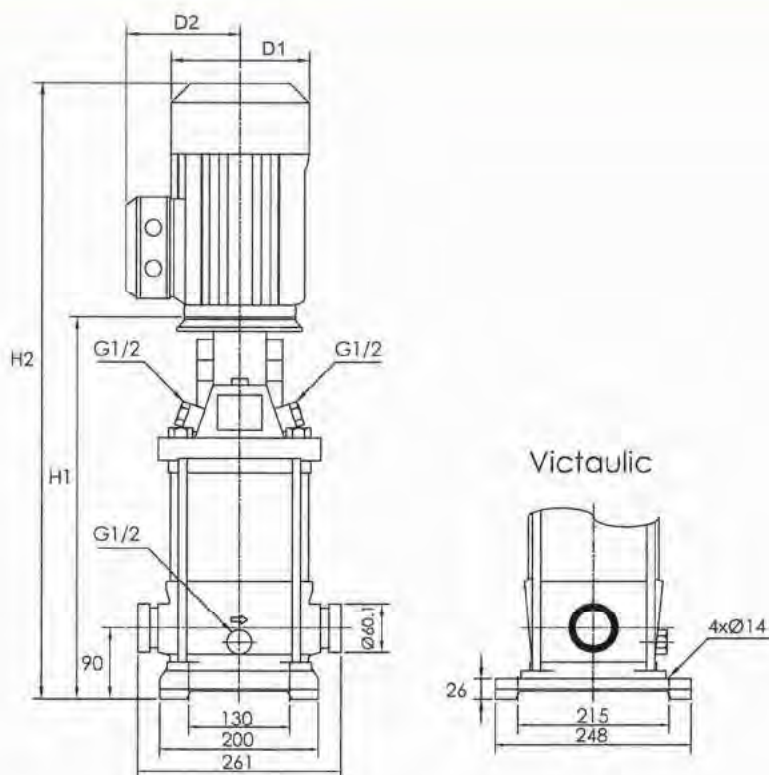
Performance Curve - 2900rpm

APE, CVF 15



Dimensions and Weights - 2900rpm

APE, CVF 15

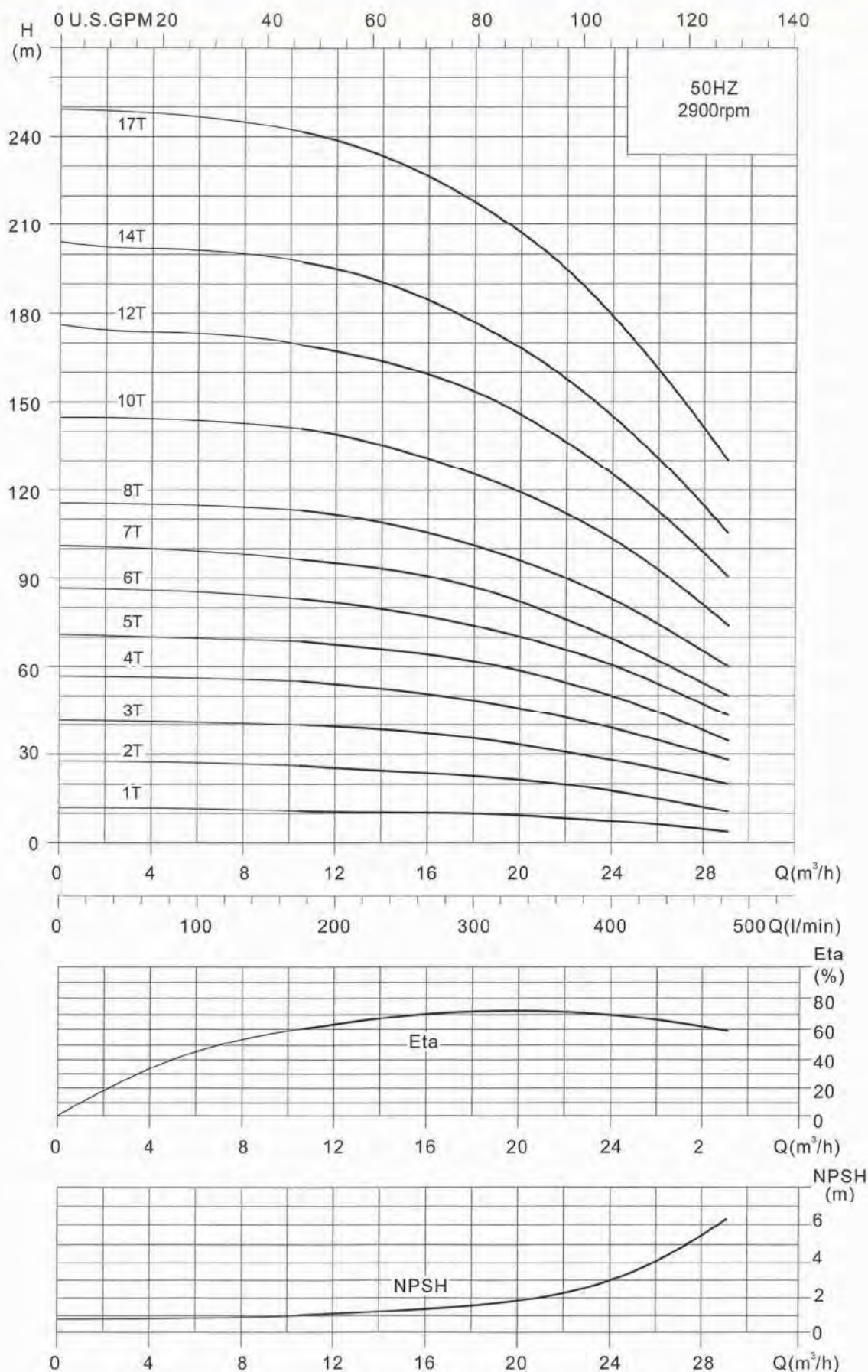


**Flange
(DIN-ANSI-JIS)
PN16-25/ DN50**

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

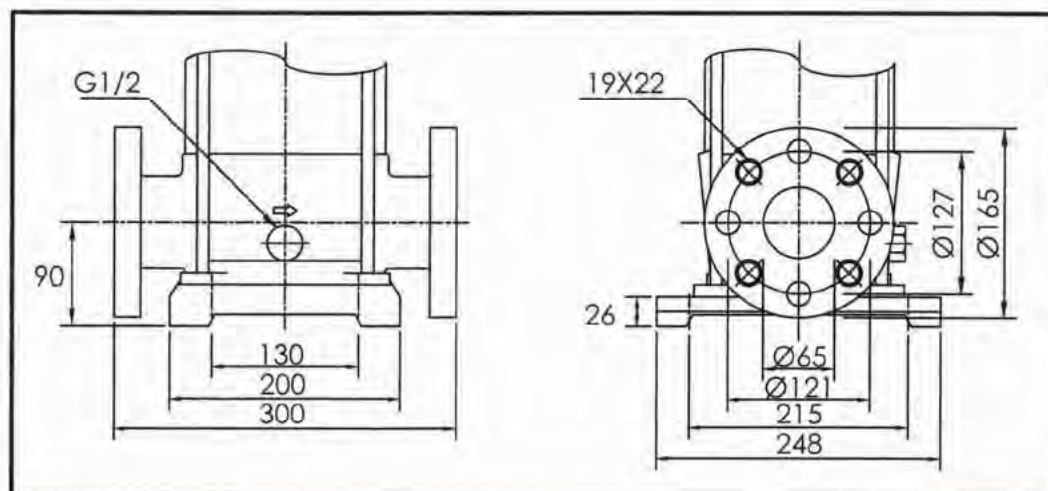
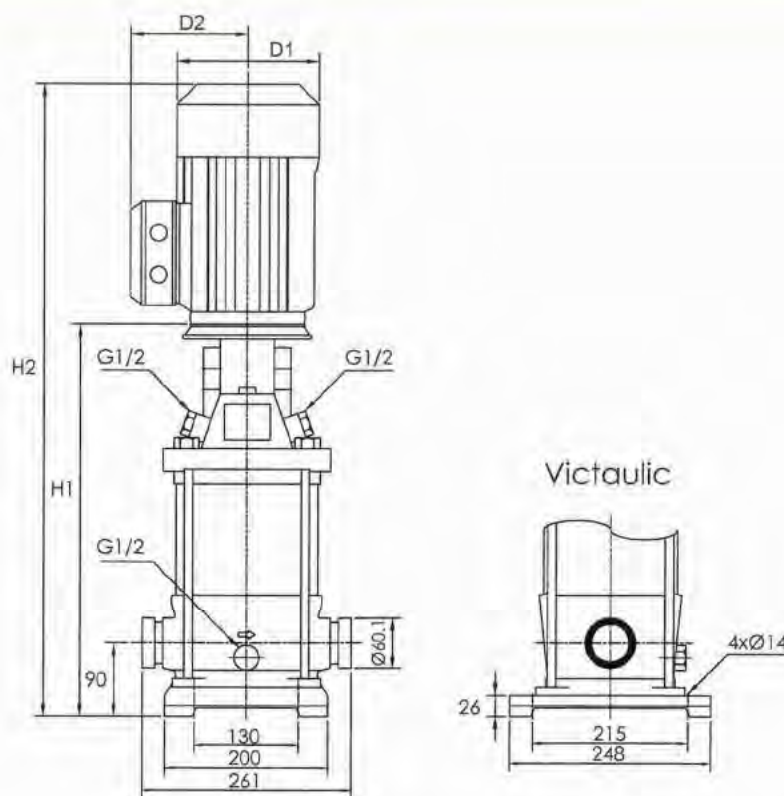
Performance Curve - 2900rpm

APE, CVF 20



Dimensions and Weights - 2900rpm

APE, CVF 20

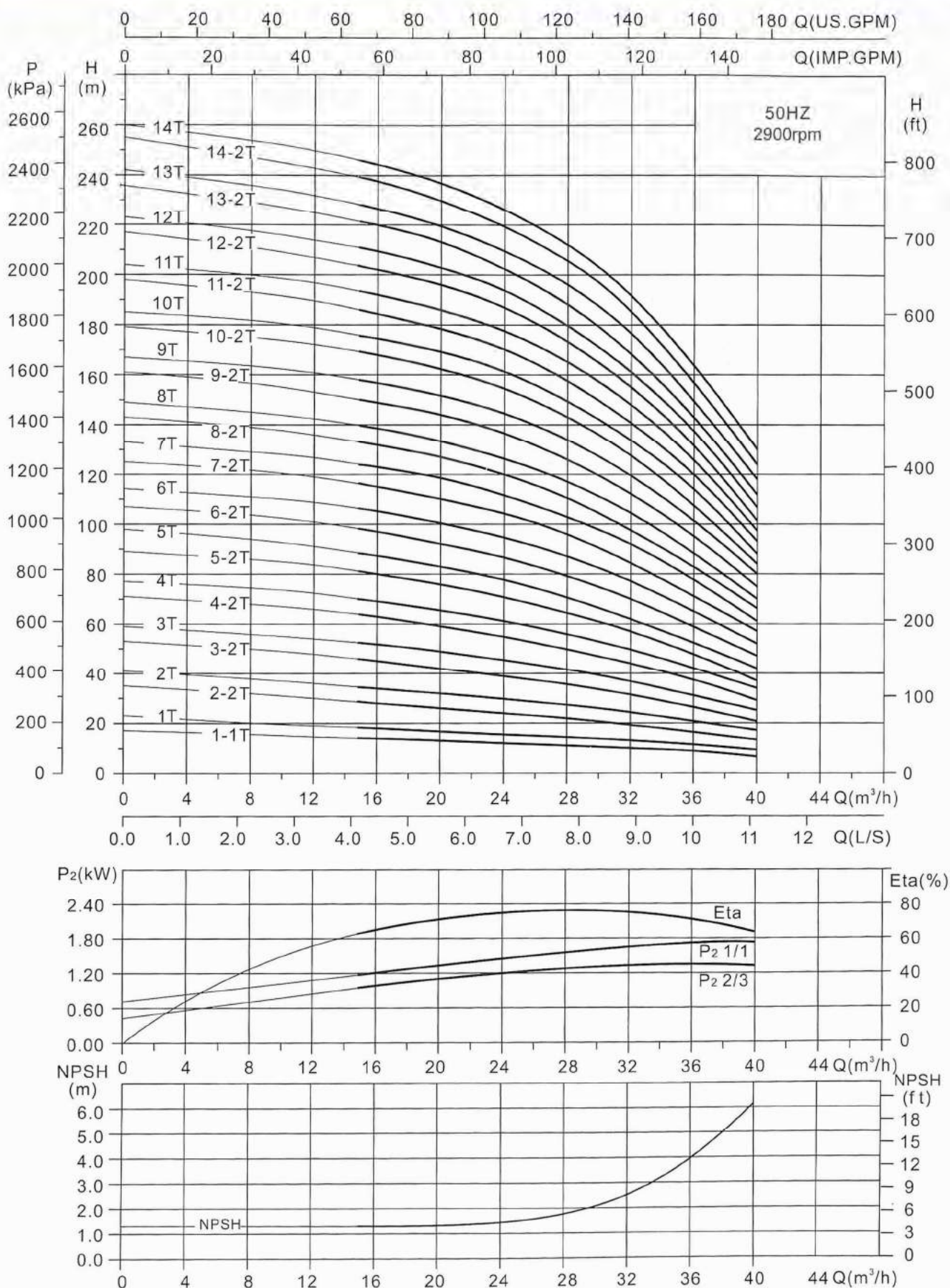


**Flange
(DIN-ANSI-JIS)
PN16-25-40 / DN50**

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

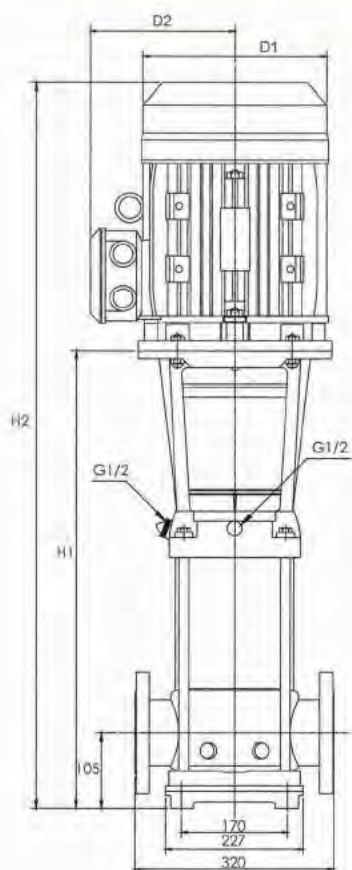
Performance Curve - 2900rpm

APE, CVF 32

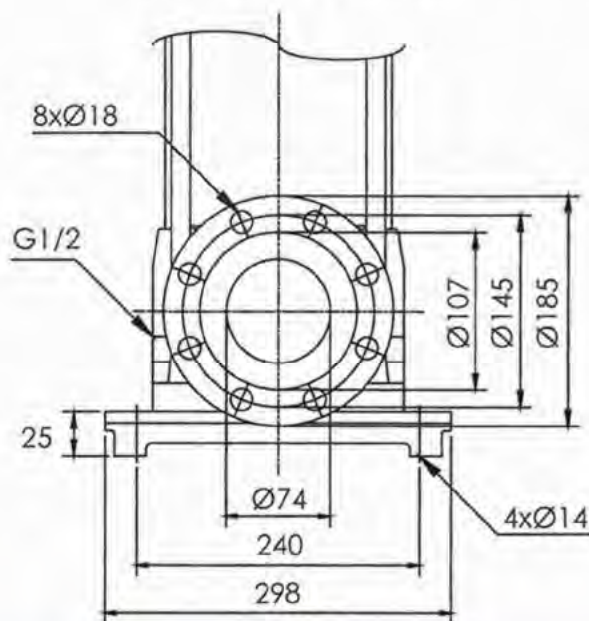


Dimensions and Weights - 2900rpm

APE, CVF 32



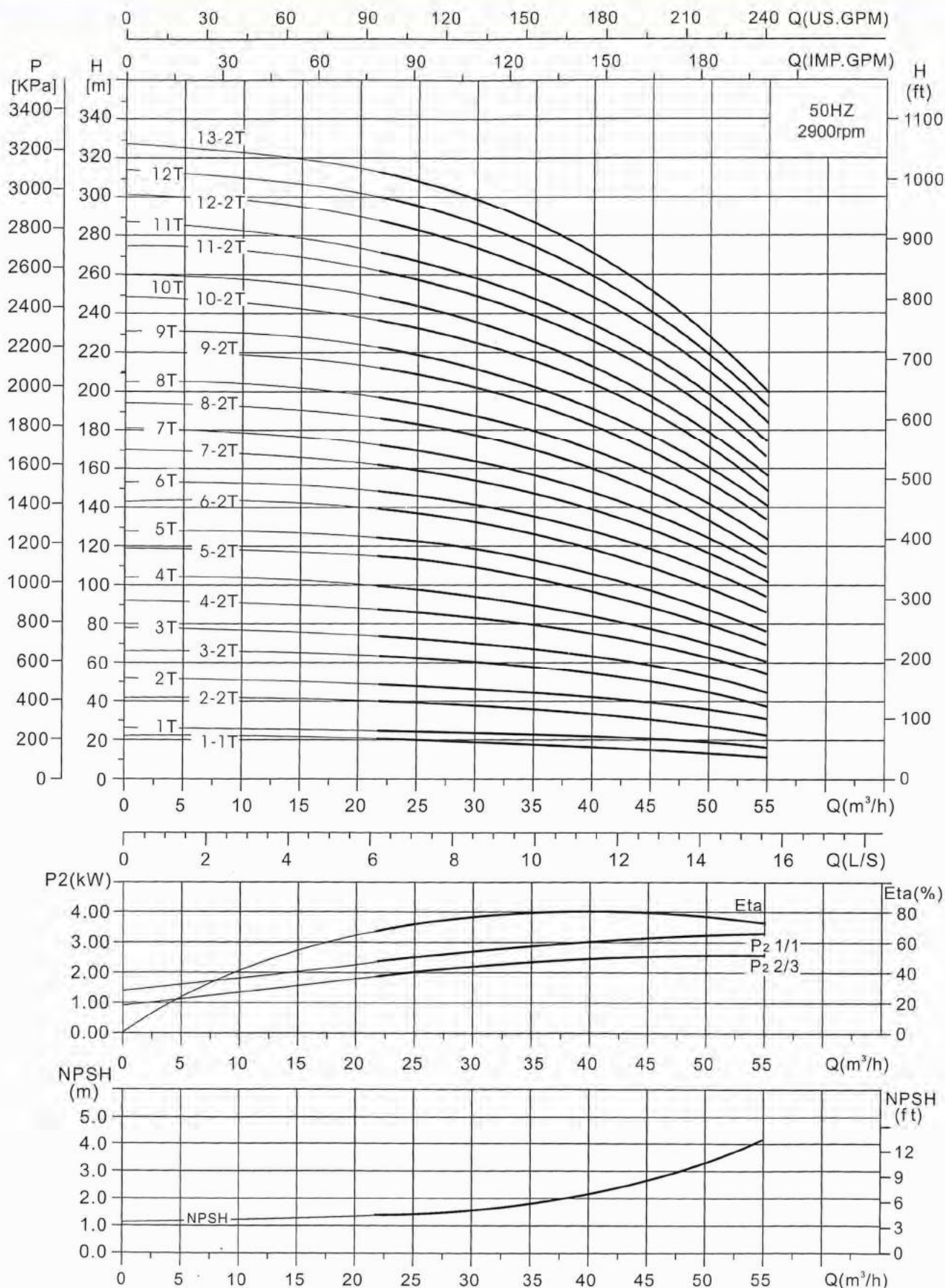
PN16-25-40 / DN65



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

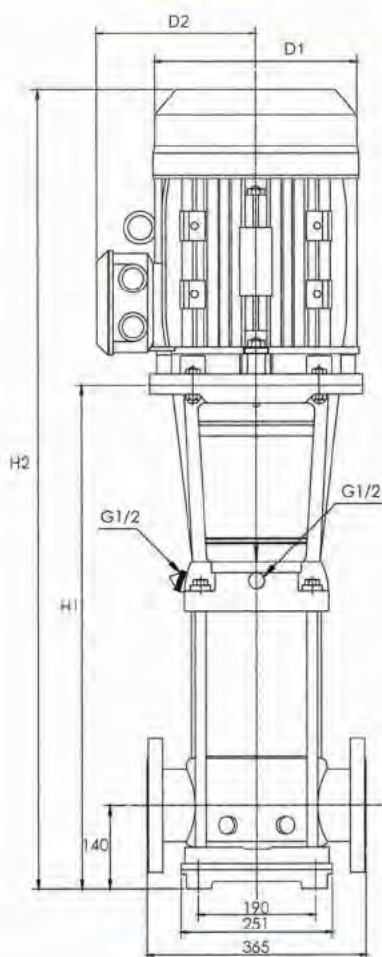
Performance Curve - 2900rpm

APE, CVF 45

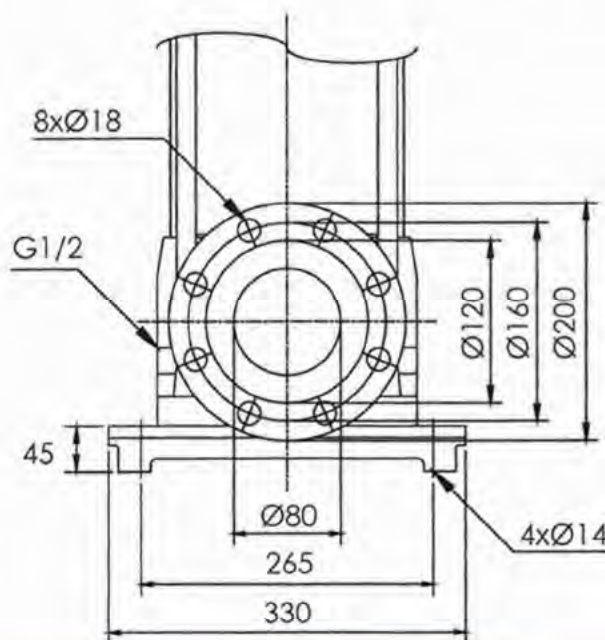


Dimensions and Weights - 2900rpm

APE, CVF 45



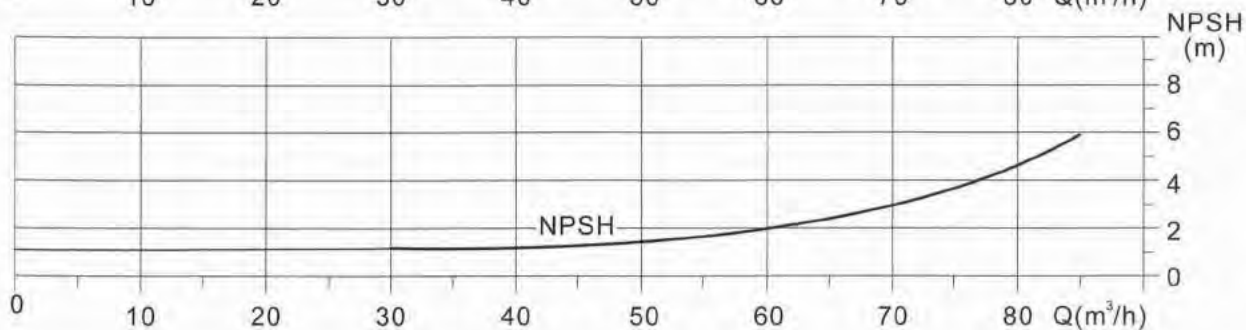
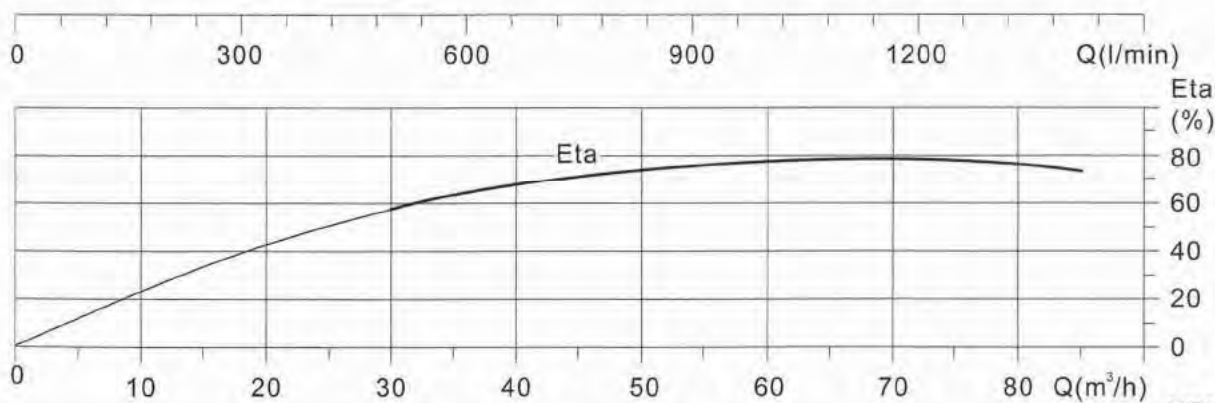
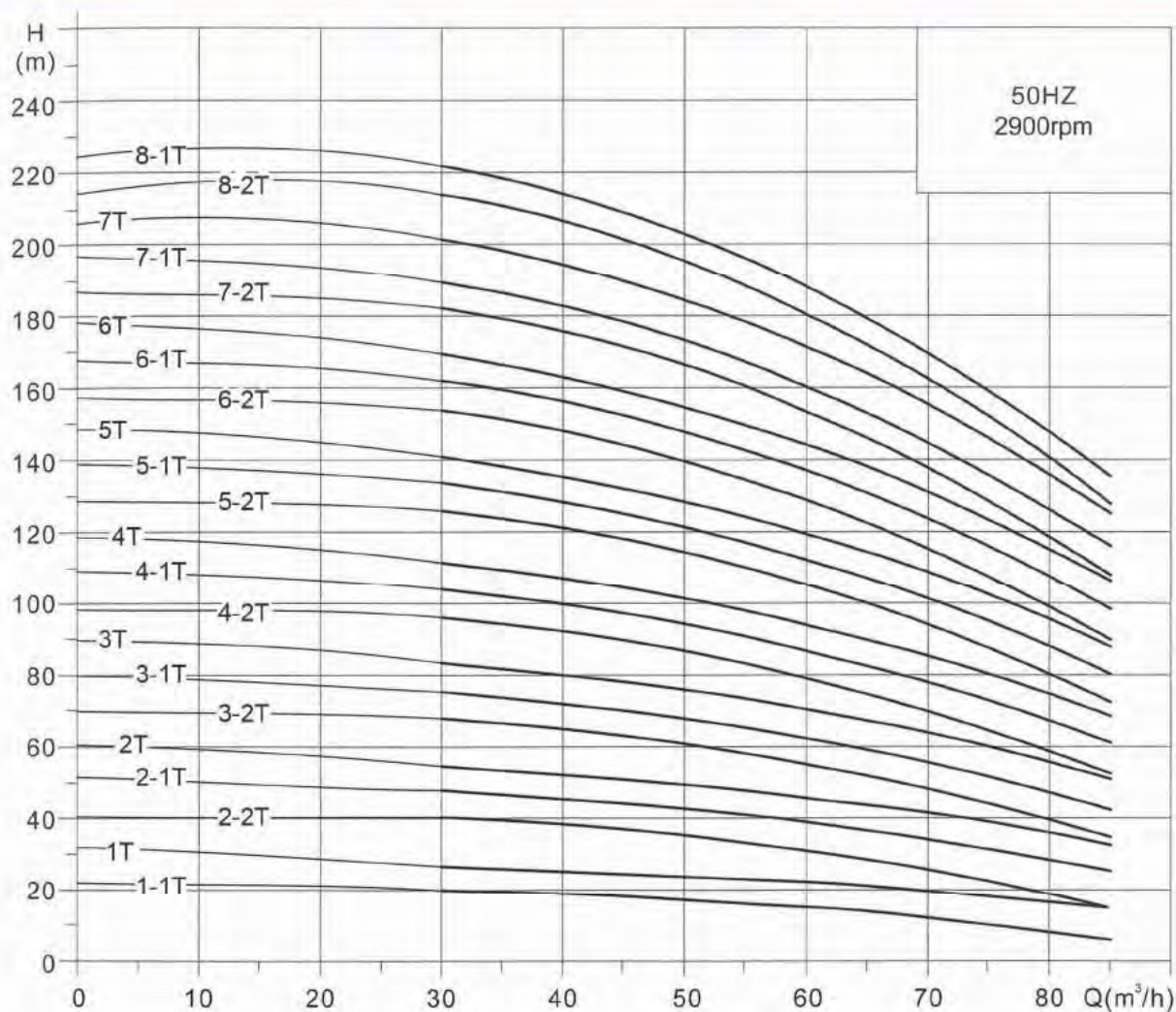
PN16-25-40 / DN80



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

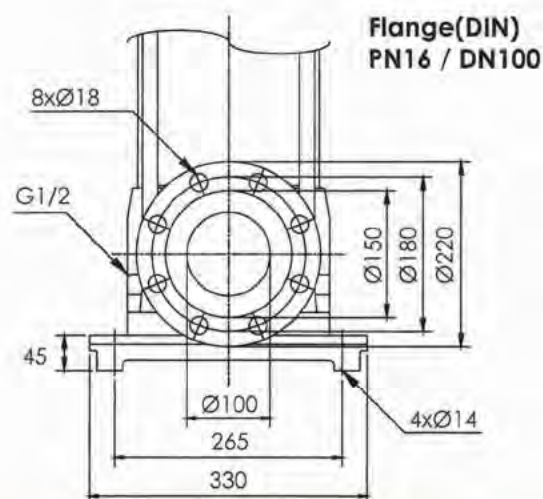
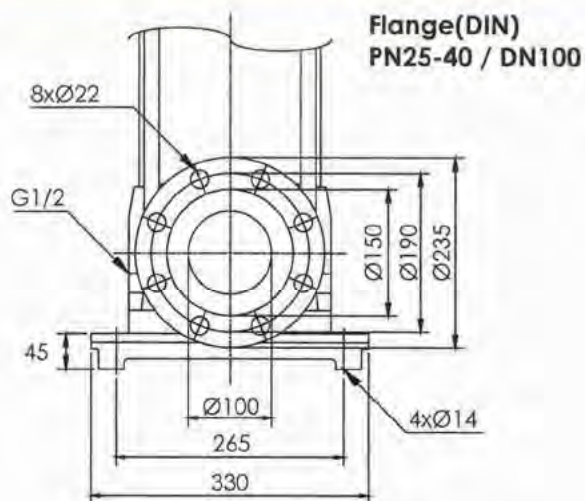
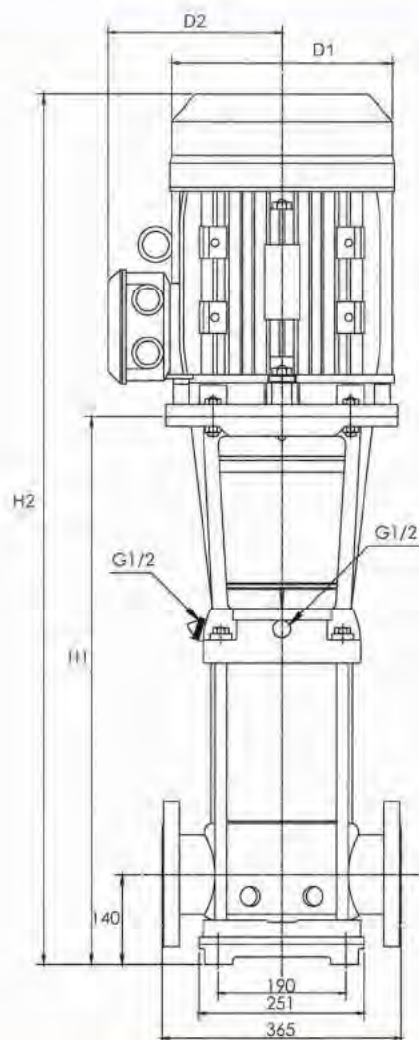
Performance Curve - 2900rpm

APE, CVF 64



Dimensions and Weights - 2900rpm

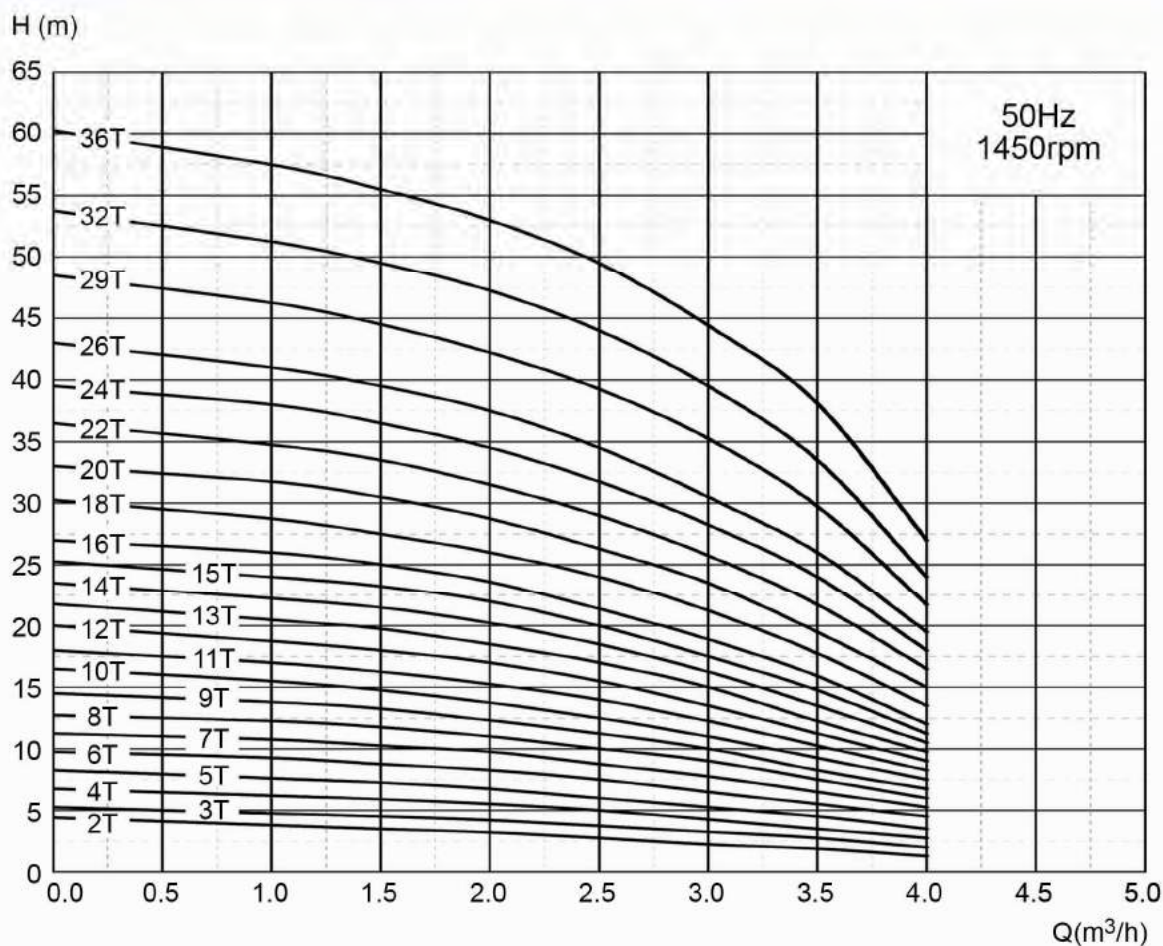
APE, CVF 64



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

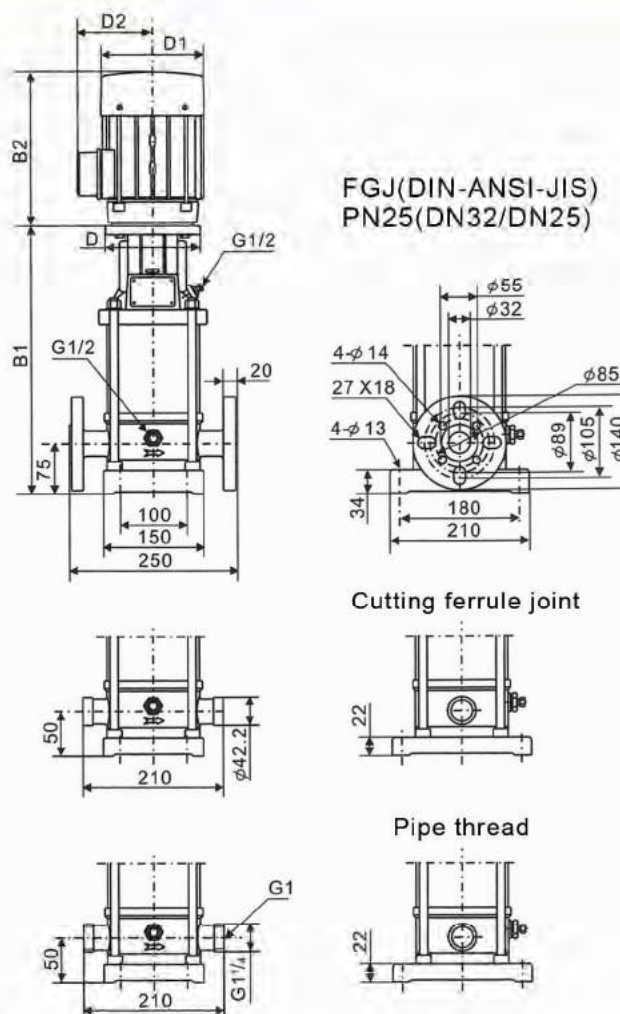
APE, CVF 5



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

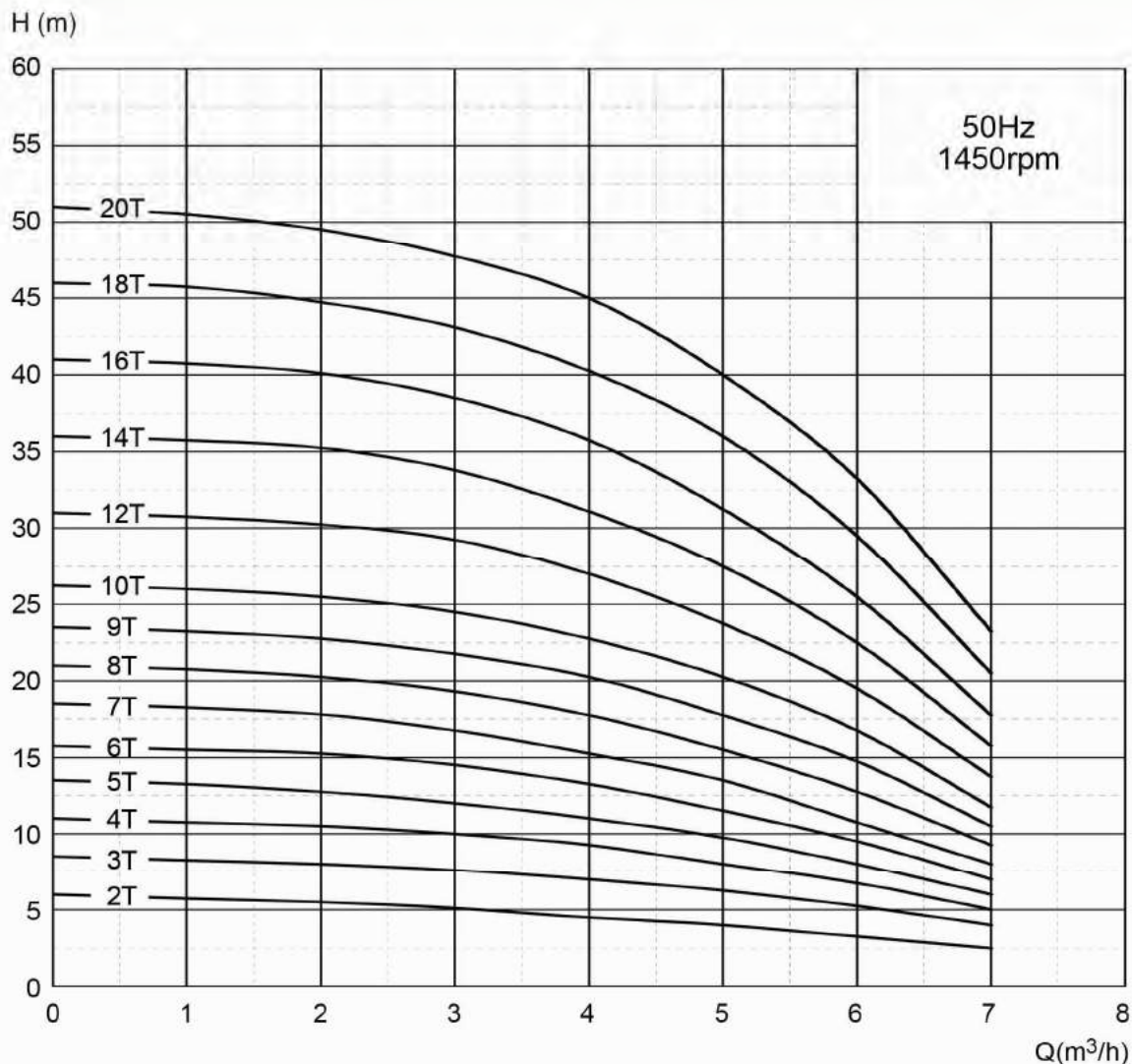
APE, CVF 5



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

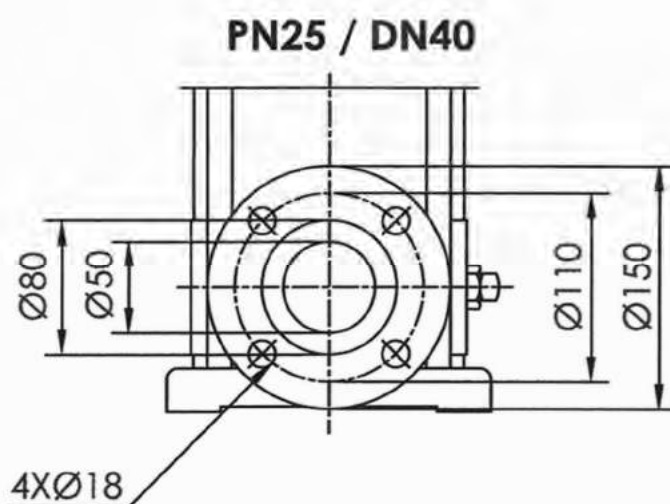
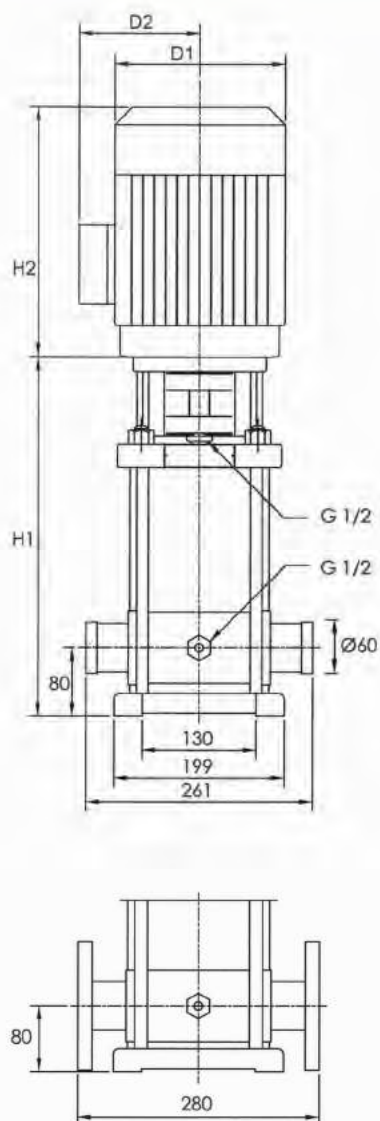
APE, CVF 10



Pump Type (1450 rpm)	Motor P2	Flow Q	0	1	2	3	4	5	6	7
	[kW]	[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

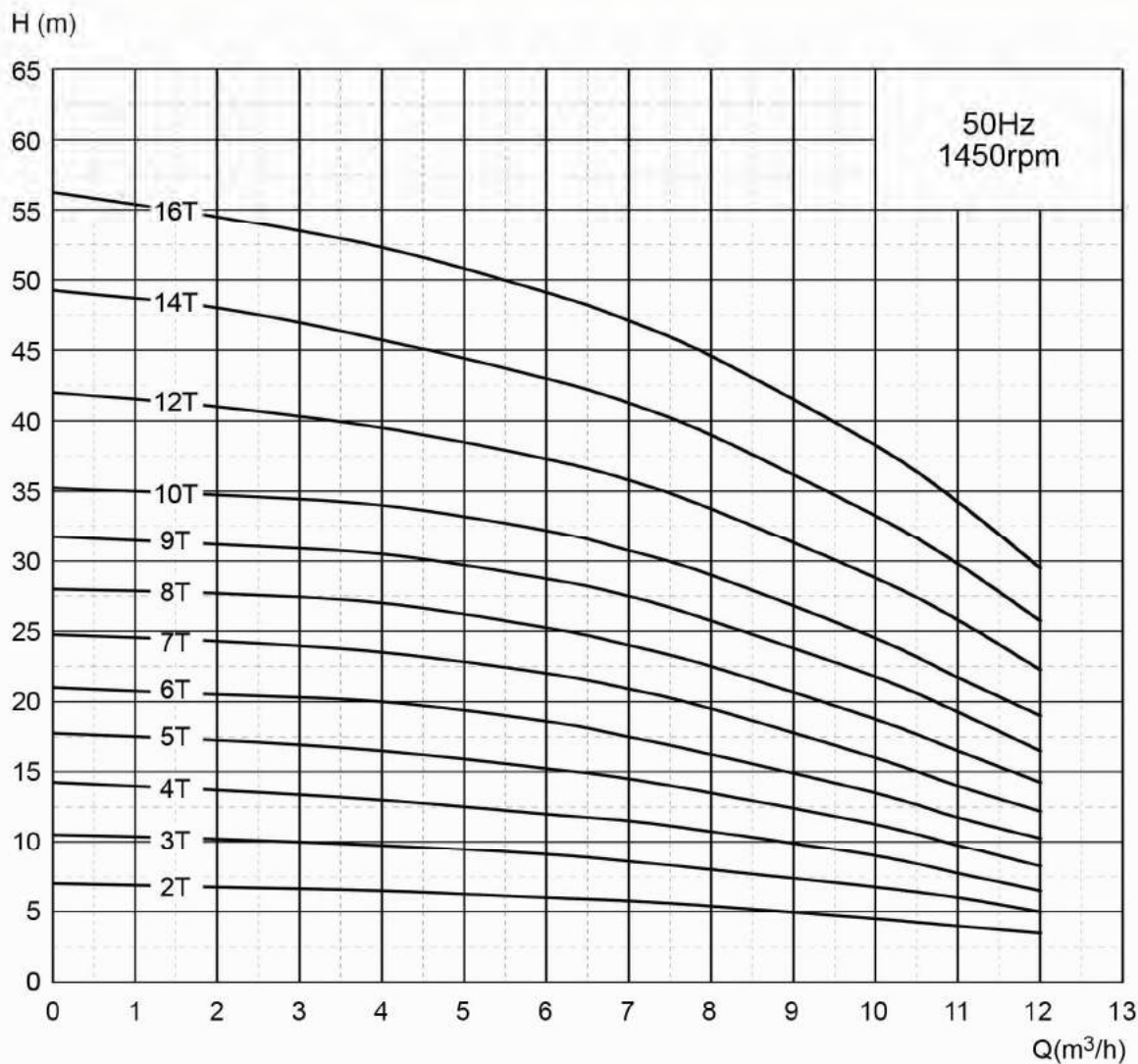
APE, CVF 10



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

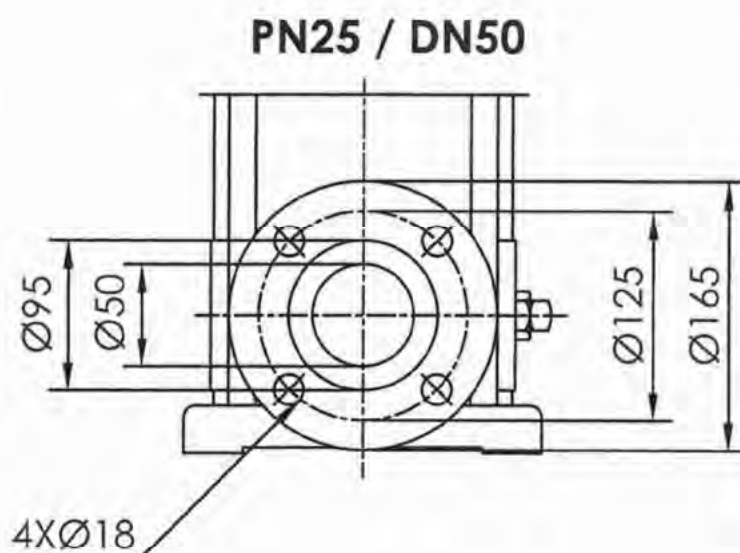
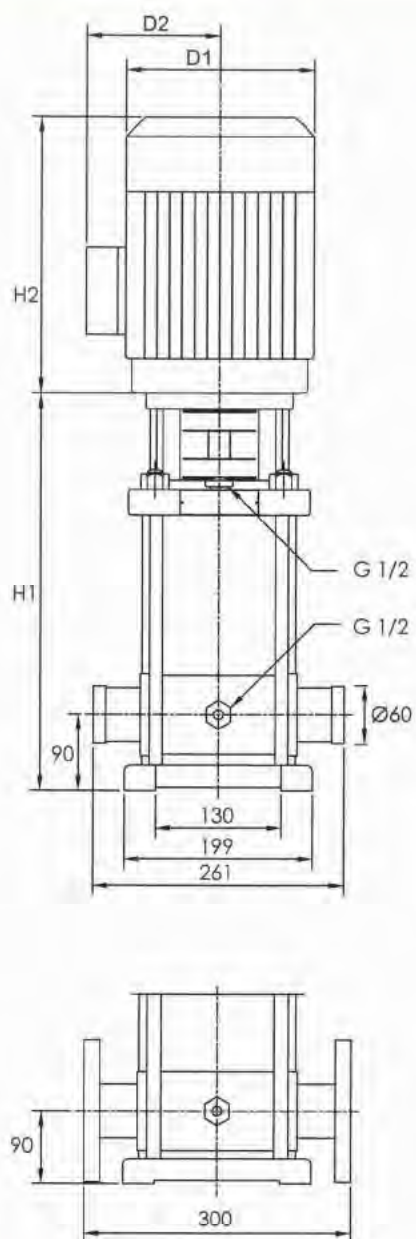
APE, CVF 15



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

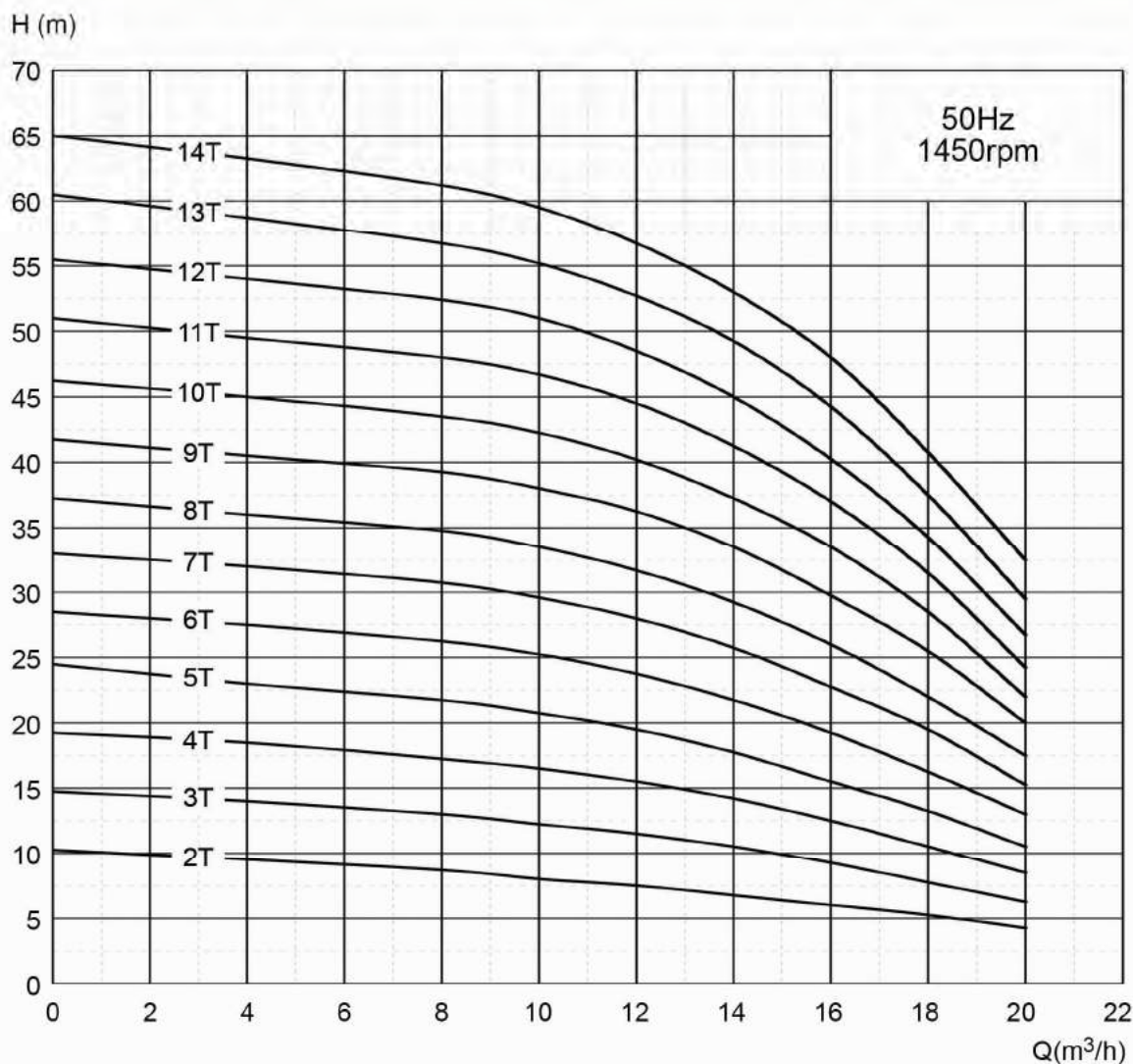
APE, CVF 15



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

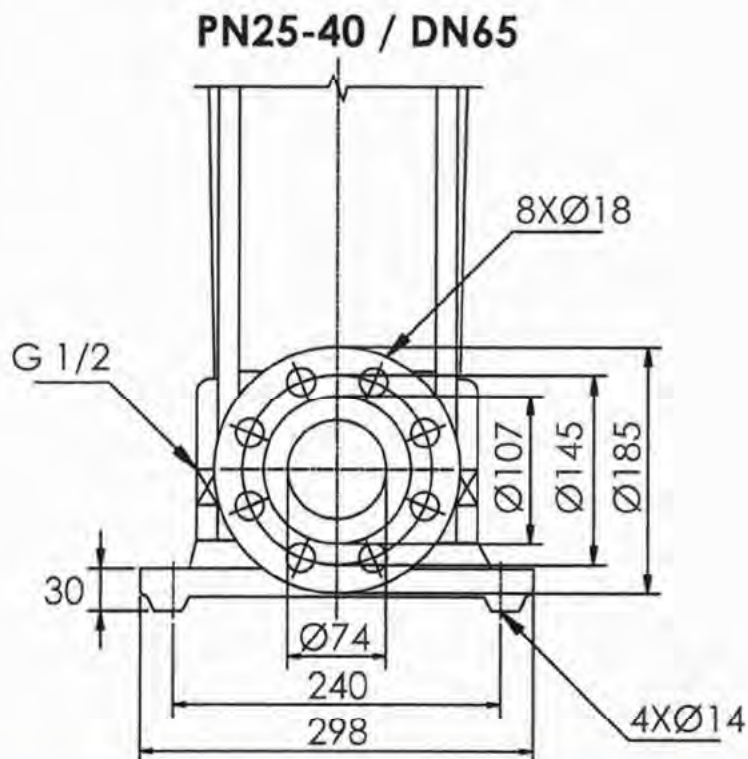
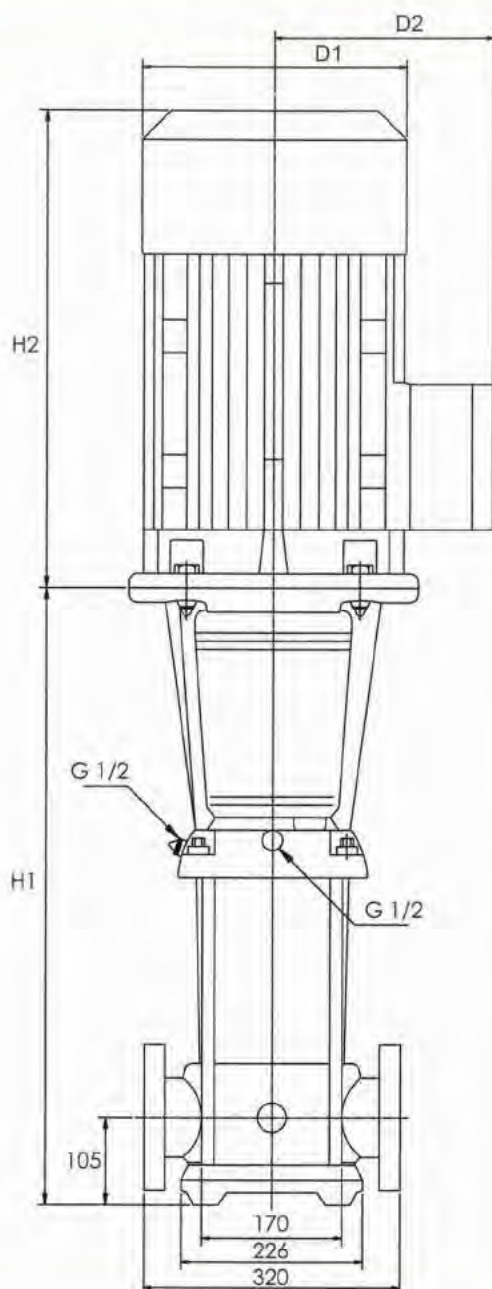
APE, CVF 32



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

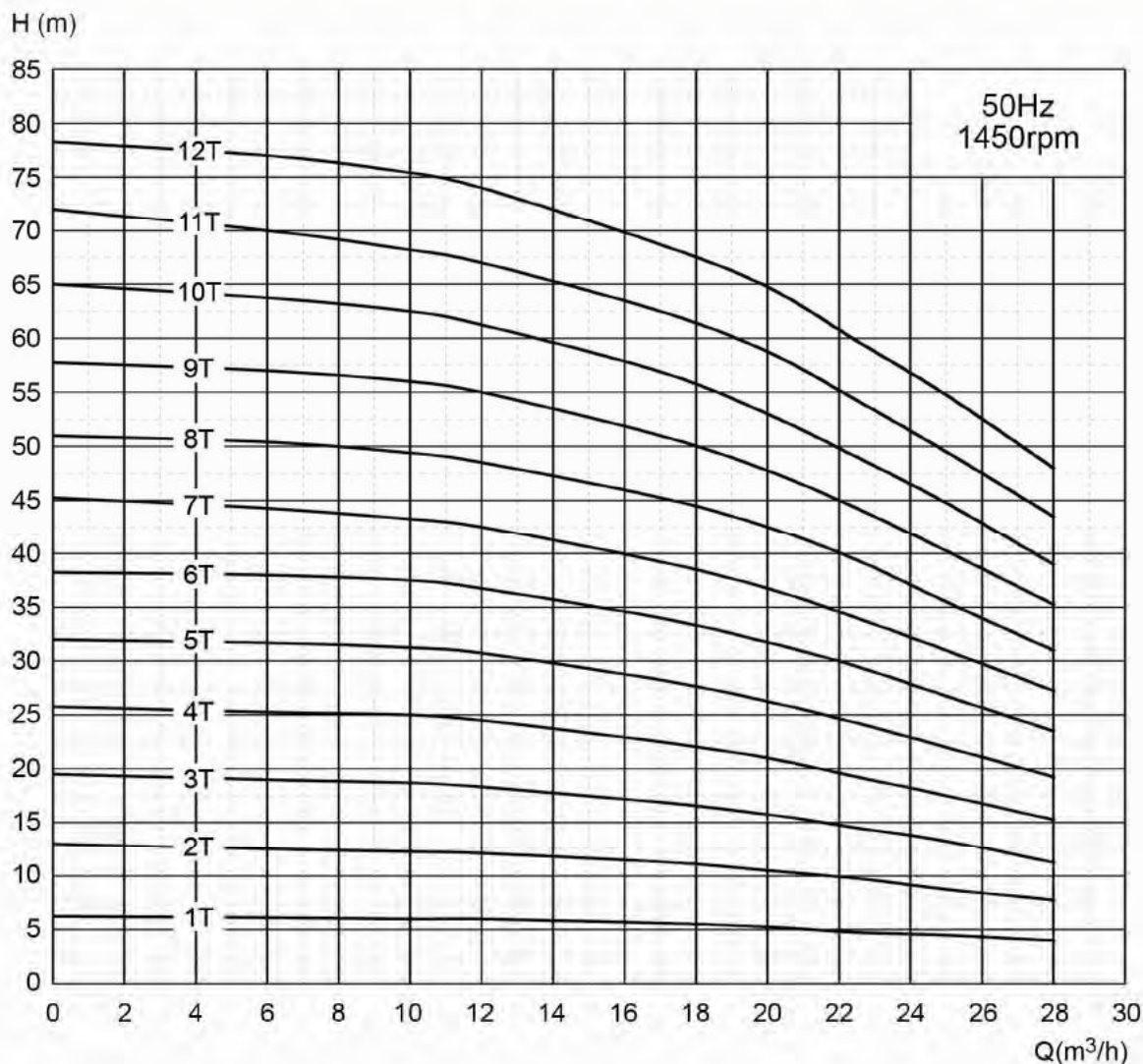
APE, CVF 32



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

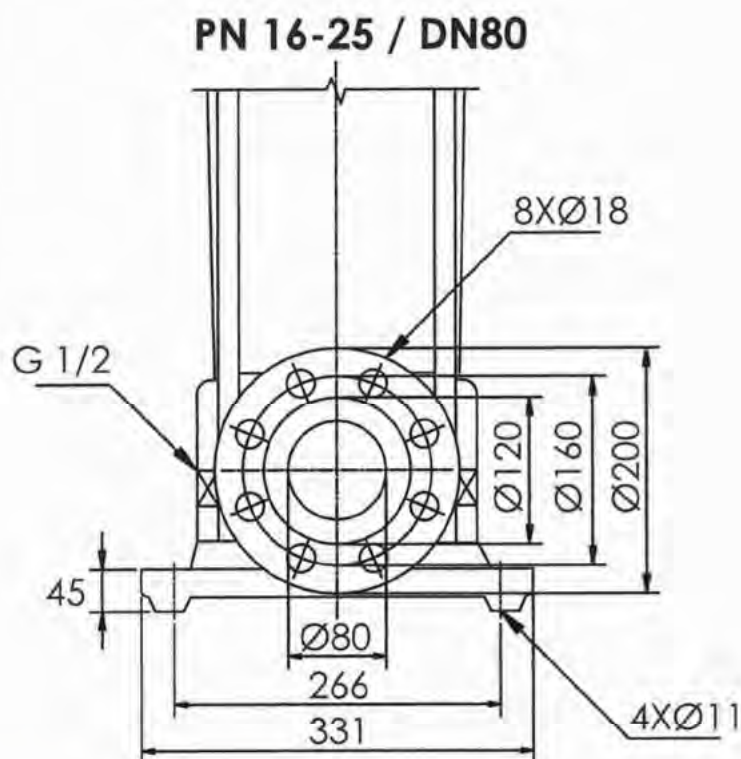
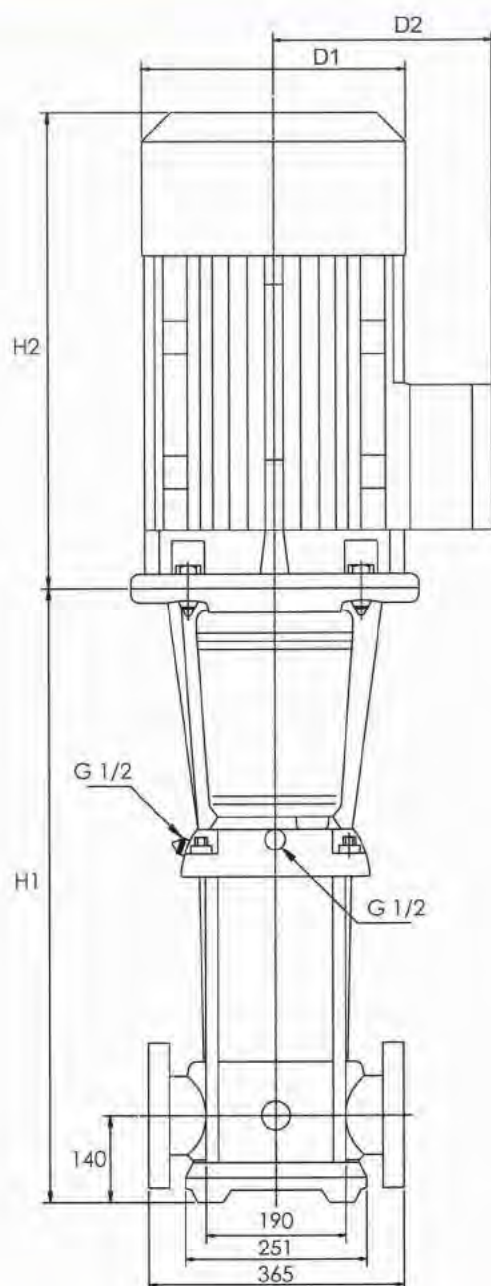
APE, CVF 45



Pump Type (1450 rpm)	Motor	Flow	0	6	10	12	17	20	22.5	25	28
	P2 [kW]	Q [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

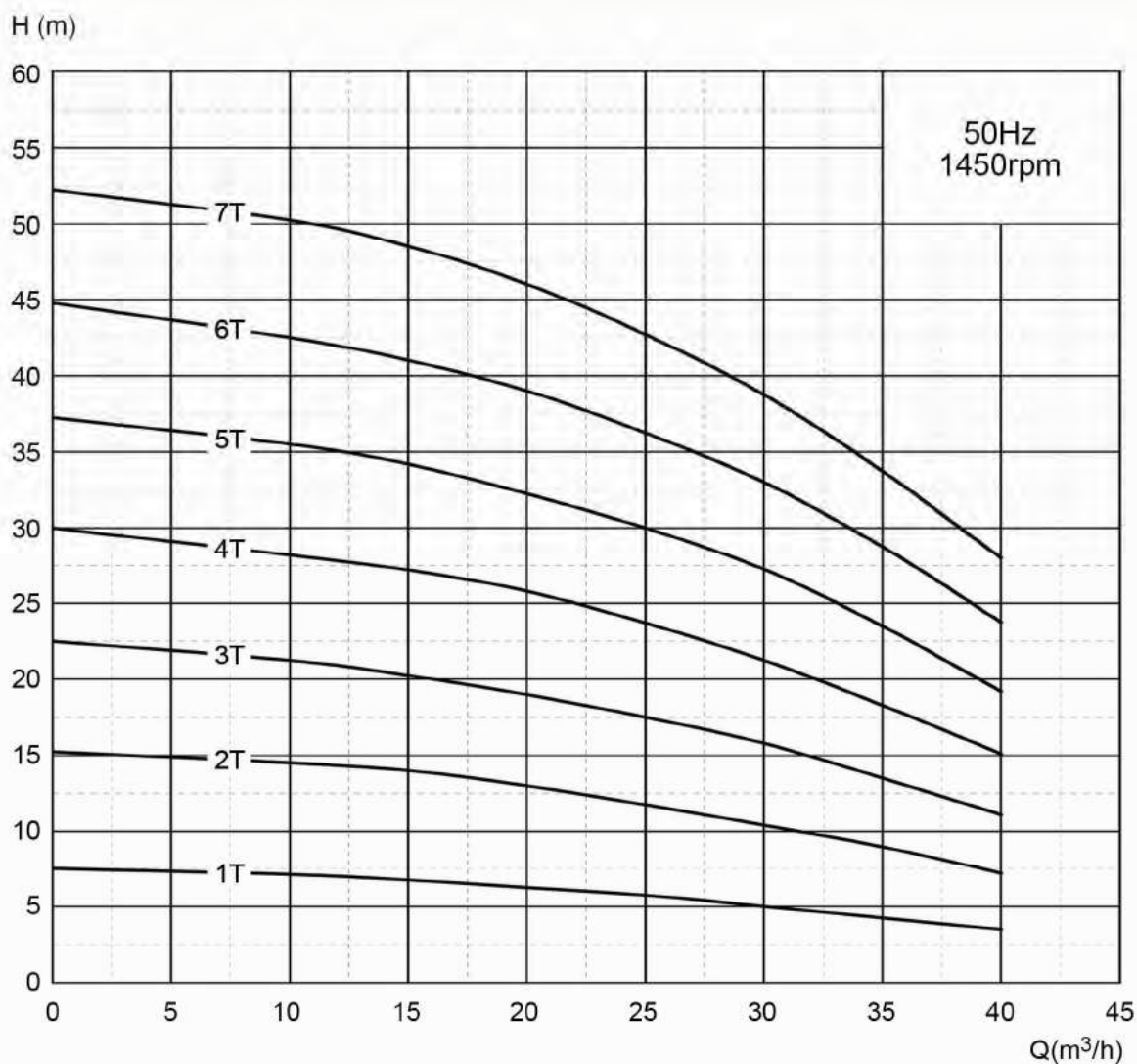
APE, CVF 45



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

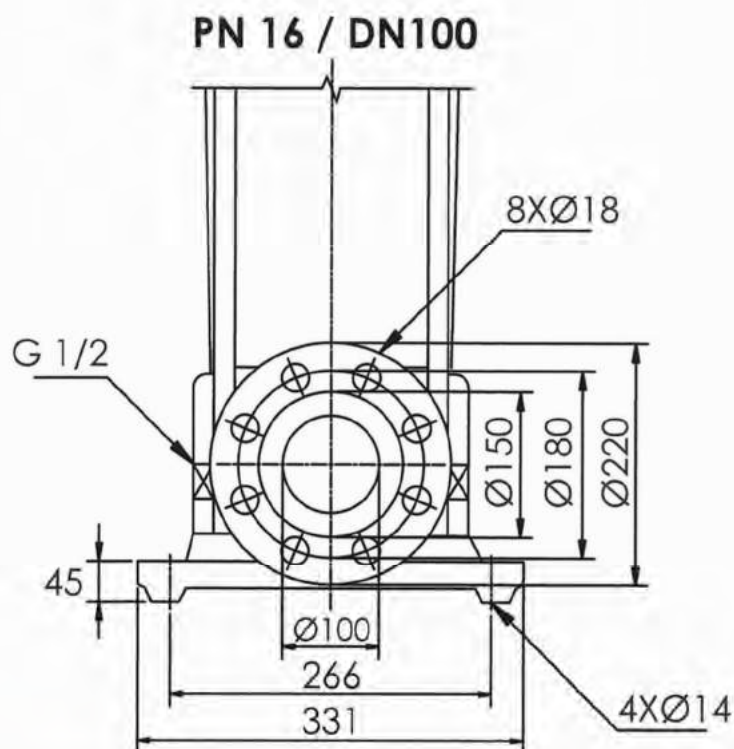
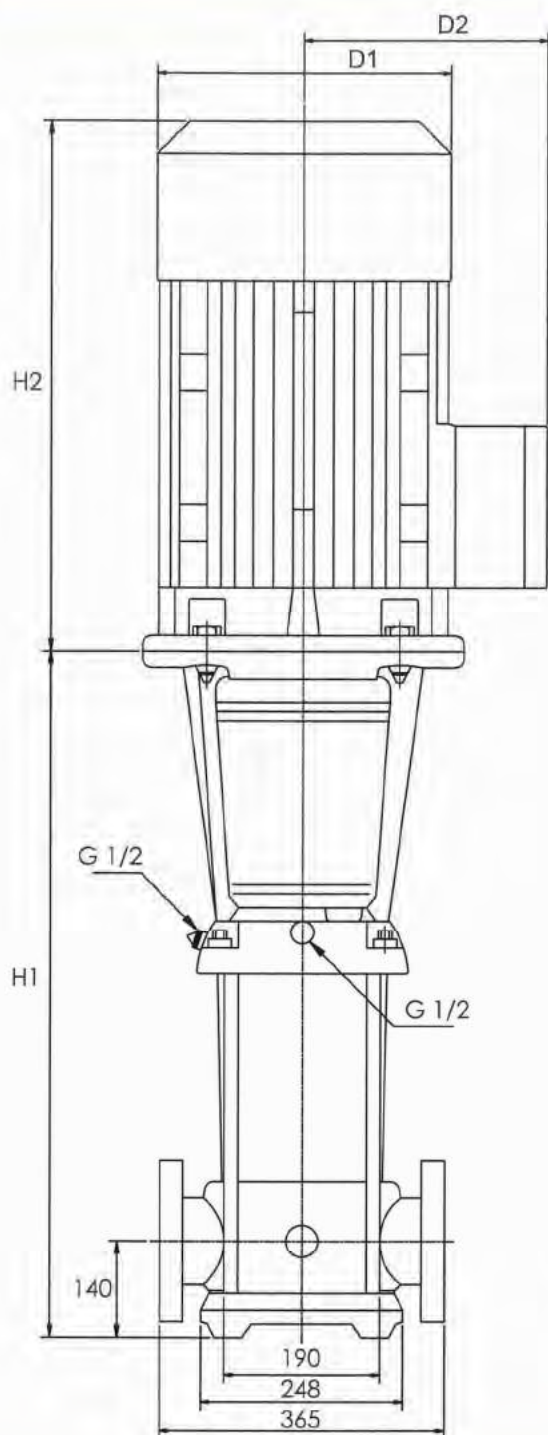
APE, CVF 64



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

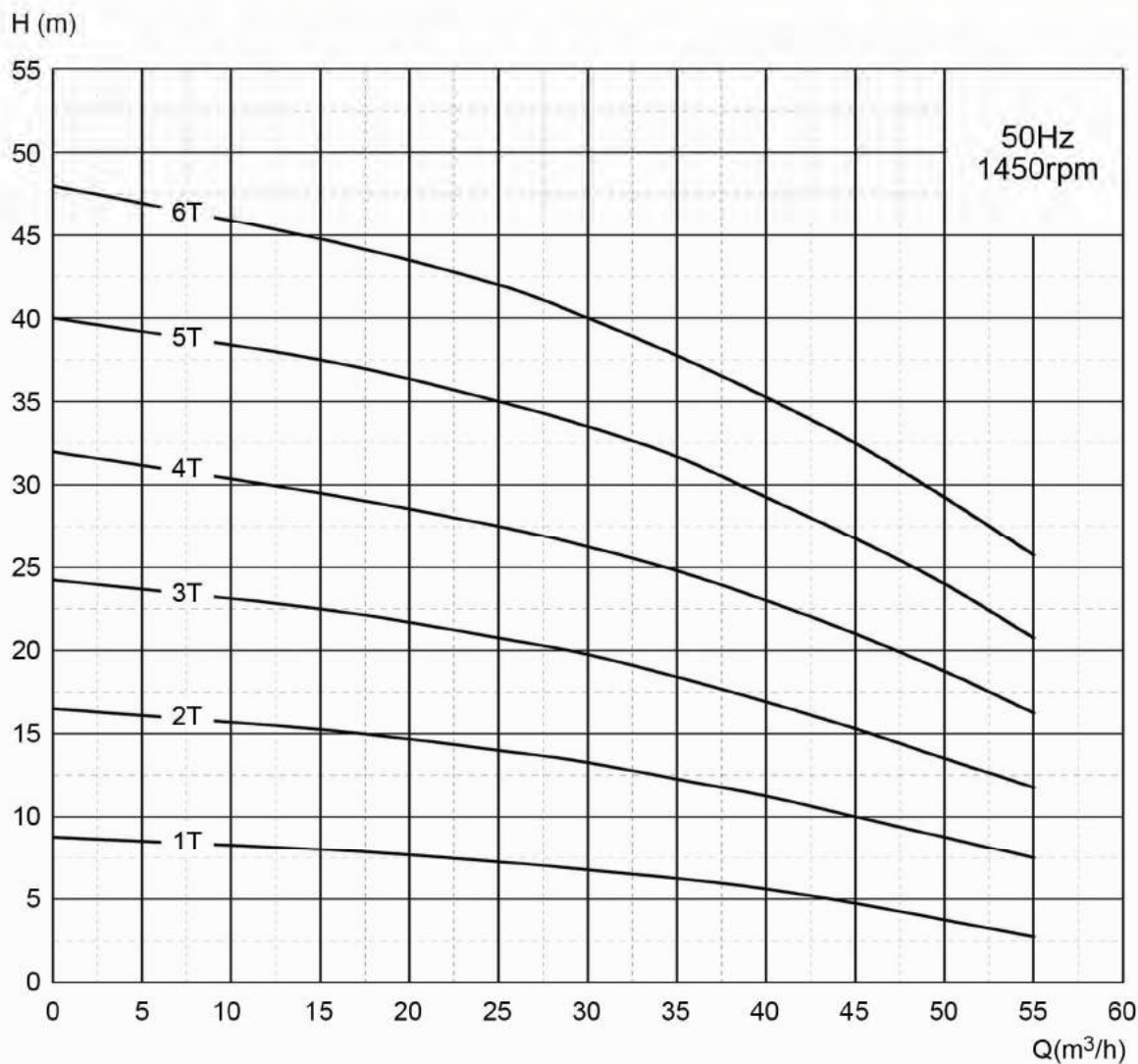
APE, CVF 64



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

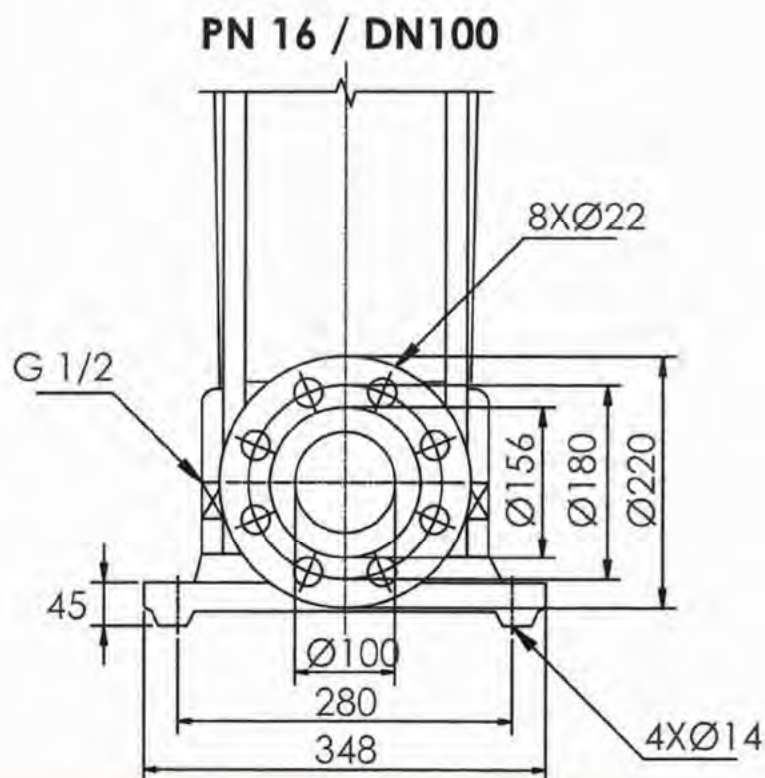
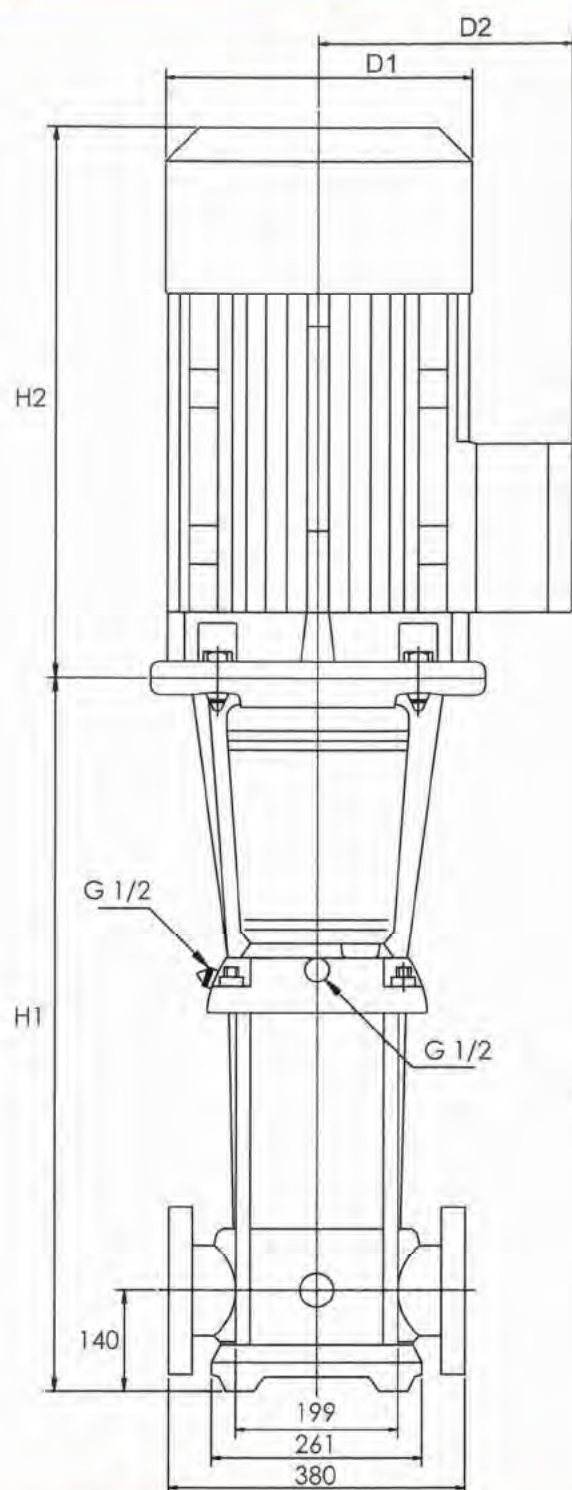
APE, CVF 90



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

General Data

CH

Application

The CH series are primarily for the industry:

- Water treatment processes
- Industrial cleaner and dishwasher
- Water boosting on process
- Water supply and boosting
(drinking water, light chlorine water)
- Air-conditioning system
- Air freshening, heater device (soft water)
- Heating and cooling for industrial process
- Fertilization/metering system and other specials

Applicable Medium

- Thin, clean, non-flammable and non-explosive liquid containing no solid granules and fibres.
- When the density or viscosity of to-be-conveyed liquid is larger than the water, it is necessary to select a high power driving motor.
- Mineral water, soft water, pure water, edible vegetable oil and other light chemical mediums
- Whether a specific liquid is suitable for the pump depends on chlorine content, PH value, temperature, solvent and oil content.

Operation Conditions

- Liquid temperature: normal $-15^{\circ}\text{C} \sim +17^{\circ}\text{C}$
hot water $< 105^{\circ}\text{C}$
- Max. environmental temperature: $+50^{\circ}\text{C}$
- Max. operating pressure: 10bar
- Max. suction pressure is limited by max. operating pressure

Electric Motor

- 2pole induction motor:
- Single phase: 220-240V/50Hz
- Three phase: 380-415V/50Hz
- Insulation class: F
- Protection: IP55
- Continuous duty and single phase with input thermal protector

Pump

- Horizontal multistage non-self-priming centrifugal pump, attached with long shaft electric motor.
- Compact structure renders small size pump, axial inlet and radial outlet

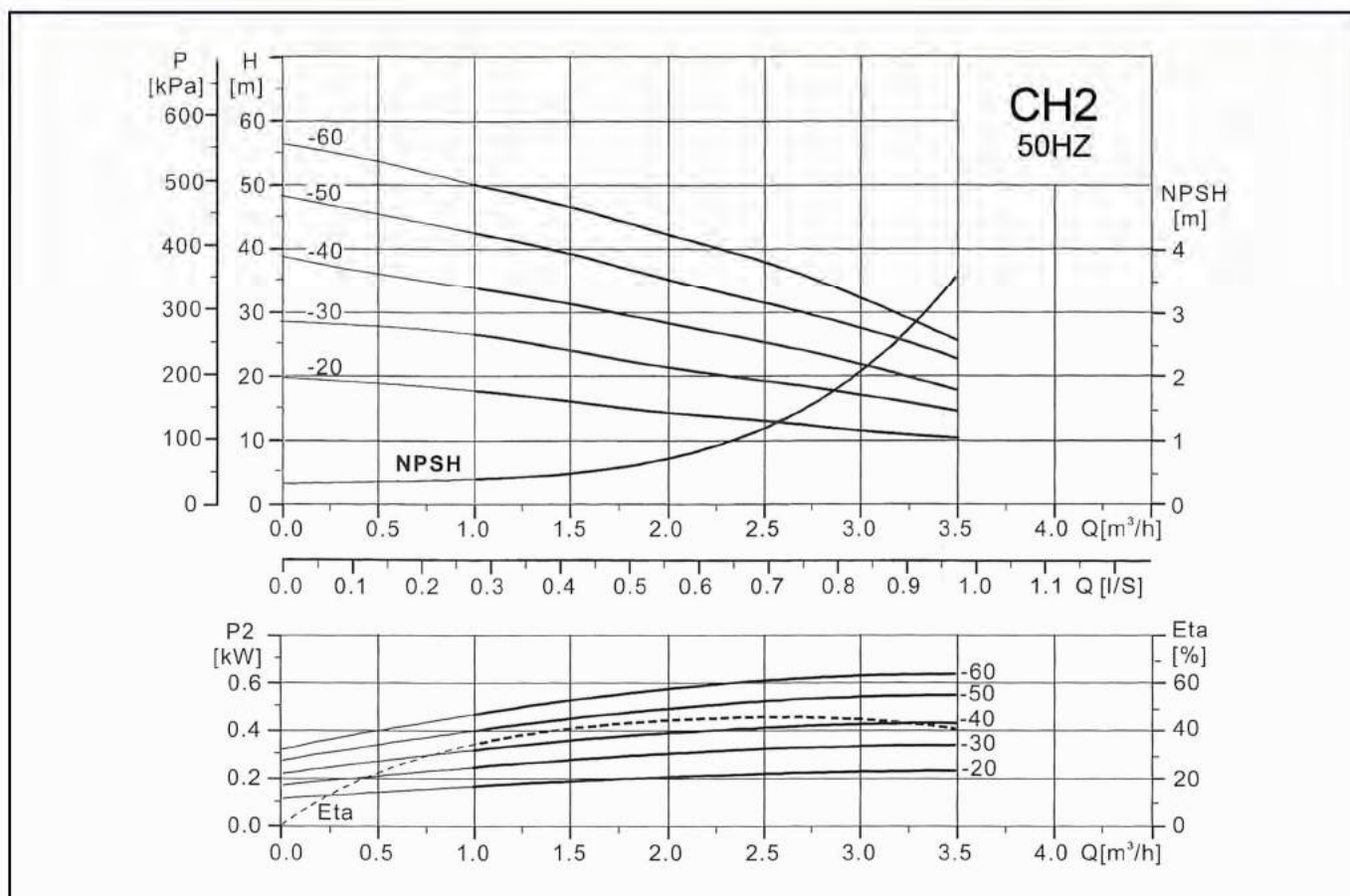
Connection Port	CH2	CH4	CH8
Inlet	G1	G1 1/4	G1 1/2
Outlet	G1	G1	G1 1/2



CH
Stainless Steel Pump SUS 304

Performance Curve

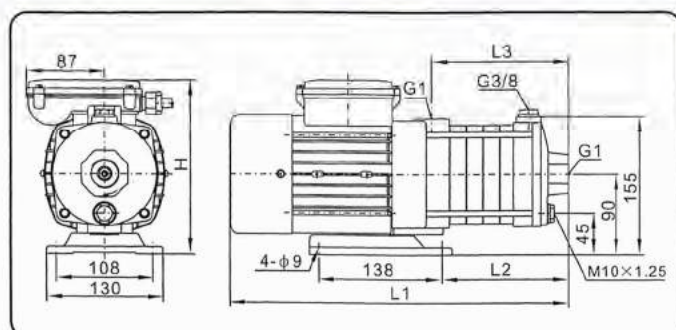
CH2



Performance Table

Model		Driving Motor P ₂ (kW)	Q m³/h	1.0	1.5	2.0	2.5	3.0	3.5
Single Phase	Three Phase								
CH2-20	CH2-20T	0.37	H (m)	18	16	14	13	11	10
CH2-30	CH2-30T	0.37		27	24	21	20	17	14
CH2-40	CH2-40T	0.55		35	32	28	26	23	17
CH2-50	CH2-50T	0.55		43	40	35	33	28	22
CH2-60	CH2-60T	0.75		50	48	42	38	32	25

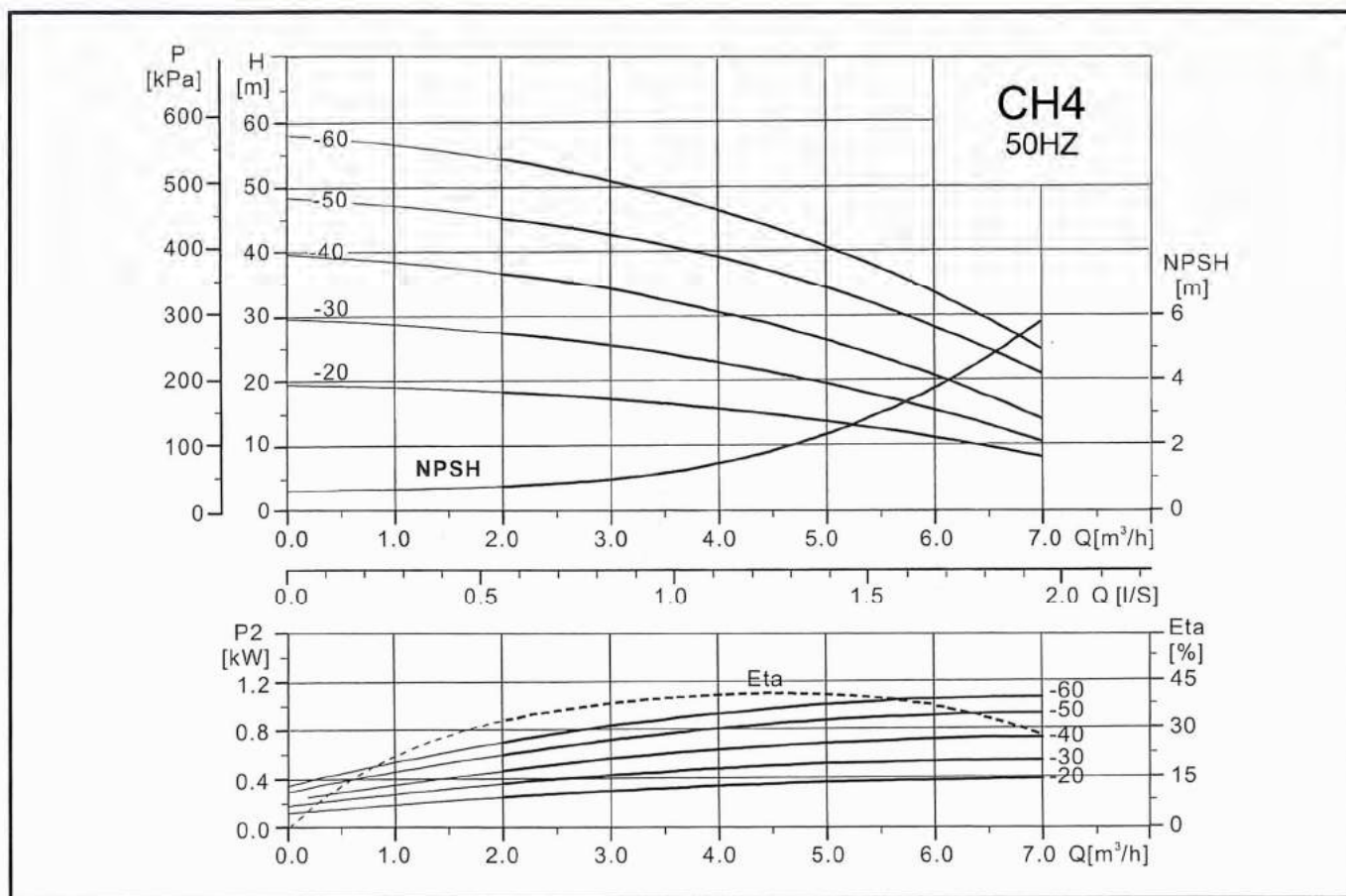
Dimensions and Weights



Model	Dimensions (mm)								Weight (kg)
	Single Phase				Three Phase				
	L1	L2	L3	H	L1	L2	L3	H	
CH2-20(T)	326	70	104	198	326	70	104	194	8.5
CH2-30(T)	344	88	122	198	344	88	122	194	9
CH2-40(T)	362	106	140	198	362	106	140	194	9.5
CH2-50(T)	380	124	158	198	380	124	158	194	10
CH2-60(T)	398	142	176	198	398	142	176	194	10.5

Performance Curve

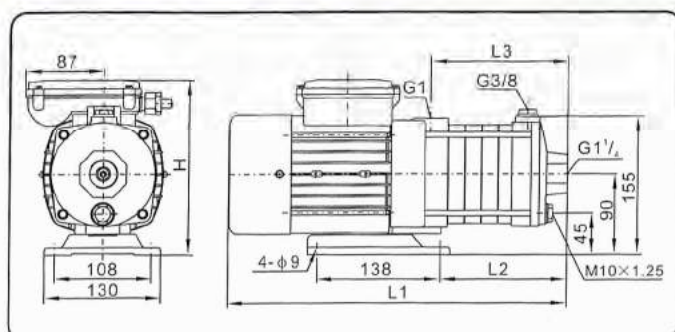
CH4



Performance Table

Model		Driving Motor P ₂ (kW)	Q m³/h	2.0	3.0	4.0	5.0	6.0	7.0
Single Phase	Three Phase								
CH4-20	CH4-20T	0.55	H (m)	18	16	15	13	10	7
CH4-30	CH4-30T	0.75		27	25	22	19	15	10
CH4-40	CH4-40T	0.75		36	33	30	26	20	13
CH4-50	CH4-50T	1		44	41	38	32	26	20
CH4-60	CH4-60T	1.1		53	50	45	40	33	24

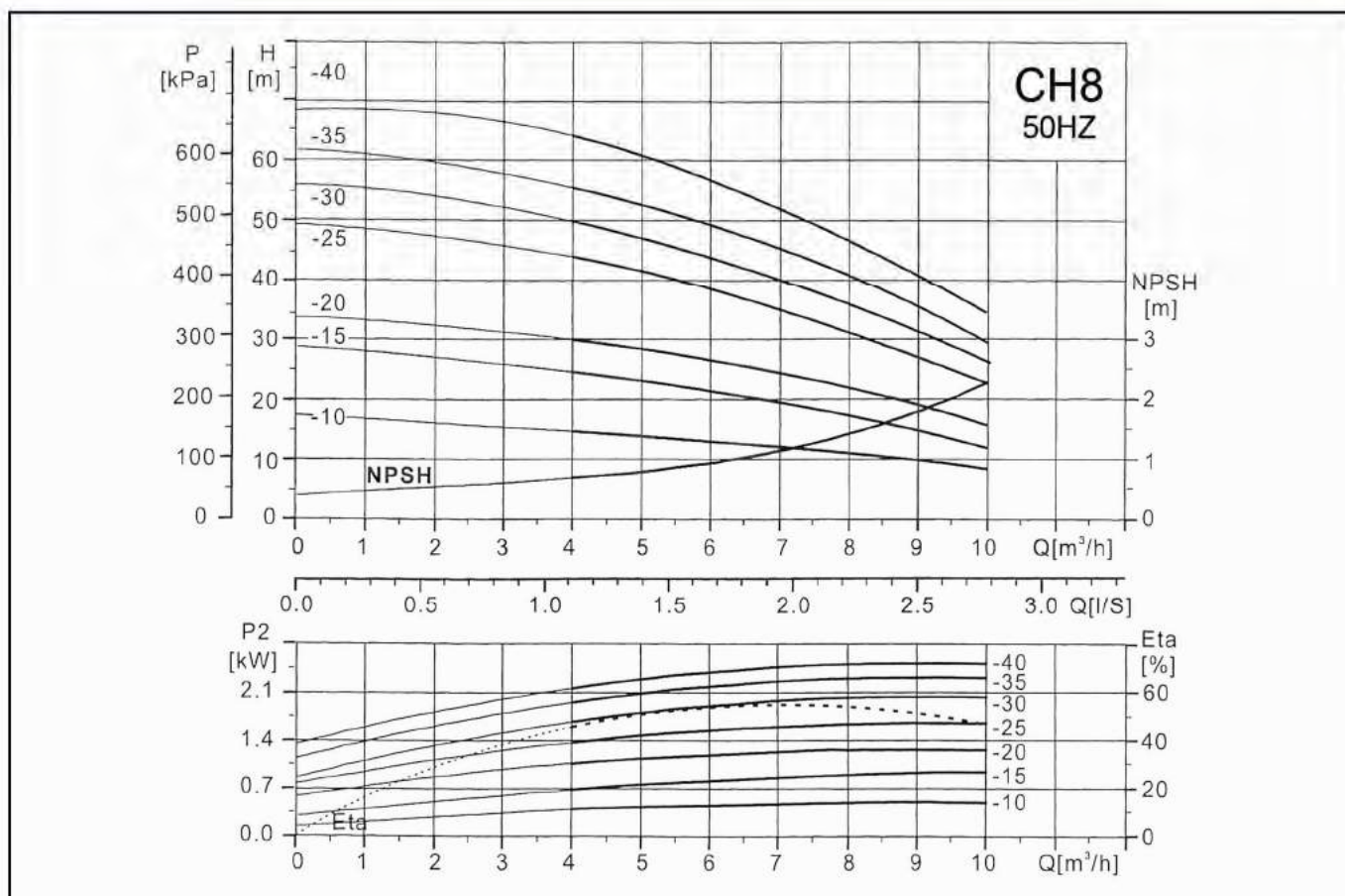
Dimensions and Weights



Model	Dimensions (mm)								Weight (kg)
	Single Phase				Three Phase				
	L1	L2	L3	H	L1	L2	L3	H	
CH4-20(T)	335	79	113	198	335	79	113	194	9
CH4-30(T)	362	106	140	198	362	106	140	194	10
CH4-40(T)	389	133	167	198	389	133	167	194	10.5
CH4-50(T)	416	160	194	198	416	160	194	194	11
CH4-60(T)	443	187	221	198	443	187	221	194	12

Performance Curve

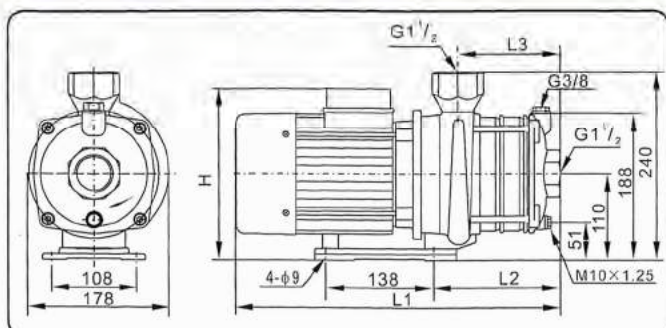
CH8



Performance Table

Model		Driving Motor P ₂ (kW)	Q m³/h	4.0	5.0	6.0	7.0	8.0	9.0	10
Single Phase	Three Phase									
CH8-10	CH8-10T	0.55	H (m)	15	14	13	12.5	12	9	8
CH8-15	CH8-15T	0.75		25	23	22	21	20	14	12
CH8-20	CH8-20T	1.0		32	29	27	25	24	21	17
CH8-25	CH8-25T	1.5		43	40	38	34	27	25	20
CH8-30	CH8-30T	1.85		50	46	44	40	36	30	26
CH8-35	CH8-35T	2.2		56	51	48	44	43	35	28
CH8-40	CH8-40T	2.2		65	57.5	57	50	48	42	34

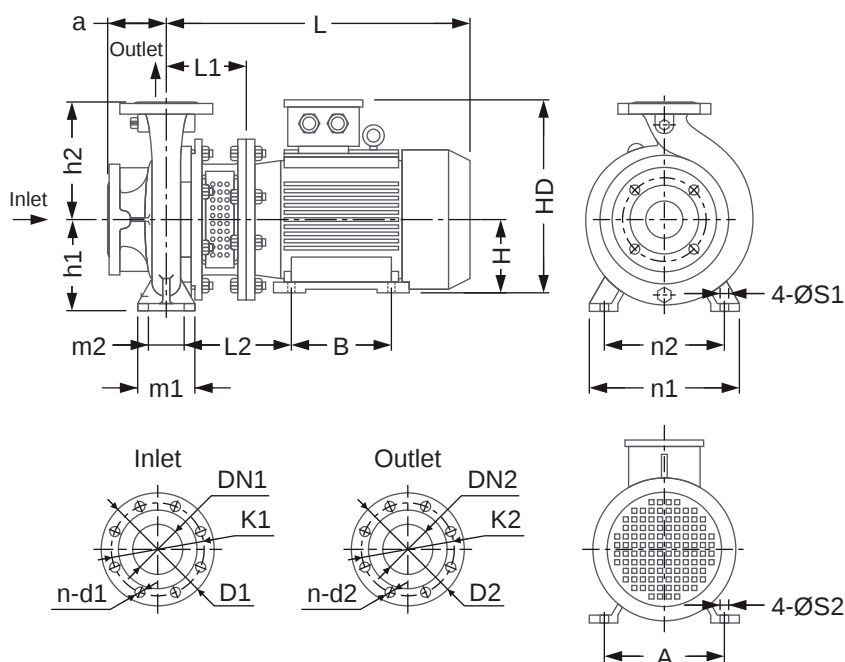
Dimensions and Weights



Model	Dimensions (mm)								Weight (kg)
	Single Phase				Three Phase				
	L1	L2	L3	H	L1	L2	L3	H	
CH8-10(T)	328	73	78	235	328	73	78	214	13
CH8-15(T)	358	103	108	235	358	103	108	214	15
CH8-20(T)	358	103	108	235	358	103	108	214	18
CH8-25(T)	426	133	138	244	426	133	138	222	20
CH8-30(T)	468	133	138	230	426	133	138	222	25
CH8-35(T)	500	163	168	230	456	163	168	222	30
CH8-40(T)	500	163	168	230	456	163	168	222	31

Dimensions

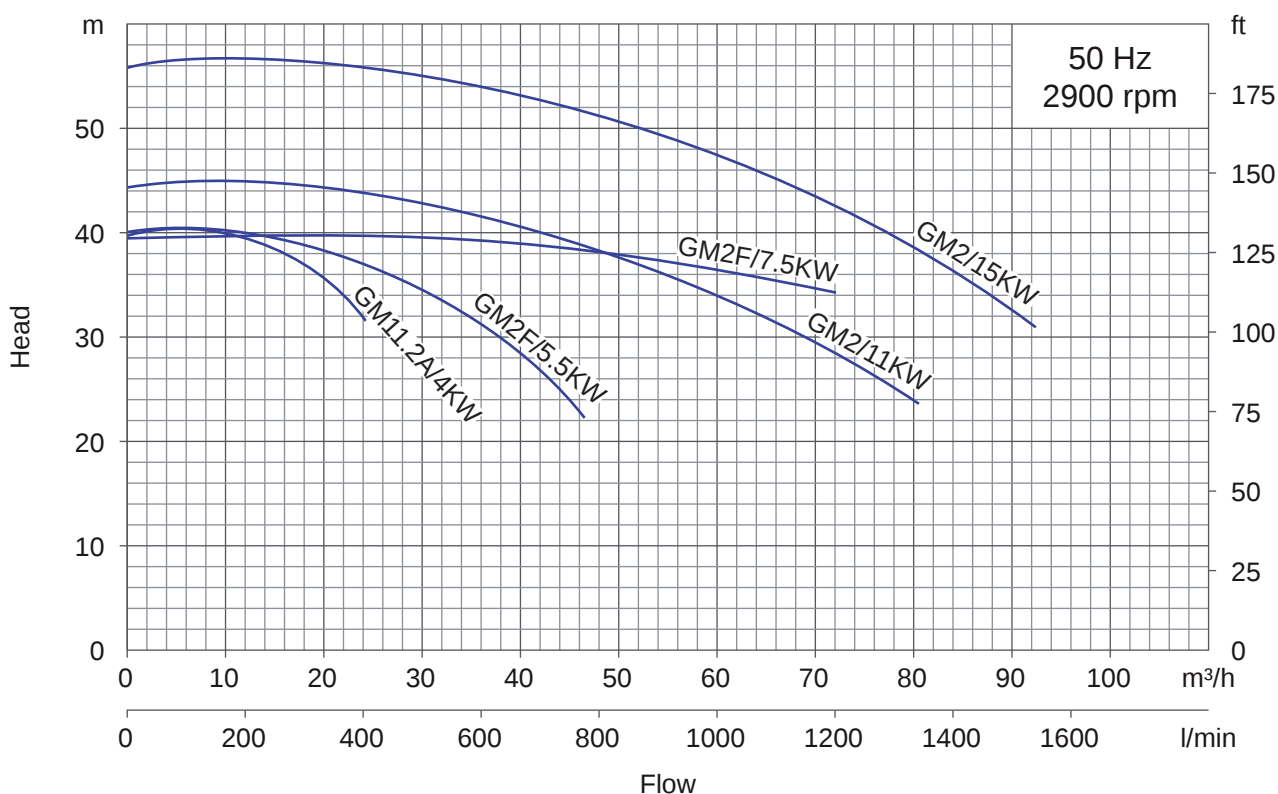
GM



Flange Dimensions (ISO75002.DIN2501 PN16) (GB/T17241.6 PN1.6)		
DN1/DN2	65	80
D1/D2	185	200
K1/K2	145	160
n-d1/n-d2	4-Ø18	8-Ø18

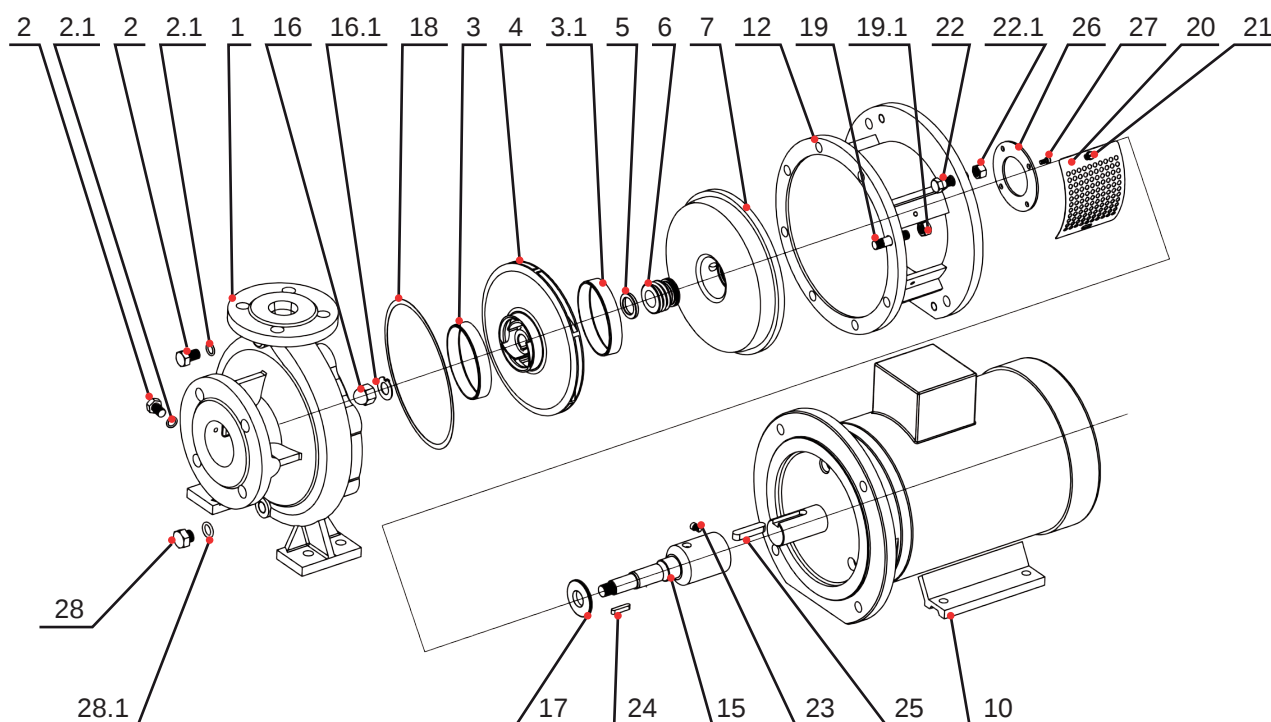
Model	DN1	DN2	Installation Dimensions (mm)													
			a	h1	h2	L1	L2	L	A	B	H	HD	m1	m2	n1	n2
GM11.2A/4KW	65	65	80	132	160	164	199	504	190	140	112	300	100	70	240	190
GM2F/5.5KW	65	65	80	132	160	187	241	577	216	140	132	345	100	70	240	190
GM2F/7.5KW	80	80	100	160	180	187	241	577	216	140	132	345	100	70	265	212
GM2/11KW	80	80	100	160	200	222	292	727	254	210	160	420	100	70	265	212
GM2/15KW	80	80	100	160	200	222	292	727	254	210	160	420	100	70	265	212

Performance Curves



Materials

GM



No.	Part Name	Quantity	Standard Materials	Optional Materials
1	Casing	1	HT200	S304 / S316
2	Plug	1	HT200	S304 / S316
2.1	Plug Spacer		PTFE	--
3	Front-Wear Ring	1	HT250	S304 / S316
3.1	Back-Wear Ring	1	HT250	S304 / S316
4	Impeller	1	H65	HT200 / S304 / S316
5	Seal Seat	1	2Cr13	S304 / S316
6	MG1 Mechanical Seal	1	Graphite / silicon carbide / fluororubber	--
7	Casing Cover	1	HT200	S304 / S316
10	B35 Motor	1	--	--
12	Adapter	1	HT200	--
15	Shaft	1	2Cr13	S304 / S316
16	Impeller Nut	1	H65	Q235(A) / S304 / S316
16.1	Lock Washer	1	H65	Q235(A) / S304 / S316
18	Casing Gasket	1	Paper	PTFE
19	Screw Bolt	1 set	35	S304
19.1	Screw Nut	1 set	35	S304
20	Shield	2	Zinc-plate	--
21	Screw	1 set	35	--
22	Screw Bolt	1 set	35	--
22.1	Screw Nut	1 set	35	--
24	Key	1	45	S304 / S316
25	Key	1	45	--
26	Bearing Cover	1	Q235(A)	--
27	Screw	4	35	--
28	Plug	1 set	Q235(A)	S304 / S316
28.1	Plug Spacer	1 set	PTFE	--

General Data

XMH

Features

- Use in air-condition or cooling system
- Use in industrial washing
- Use in floors of pressurized water supply

Materials

- SUS304 pump housing, impellers and shaft

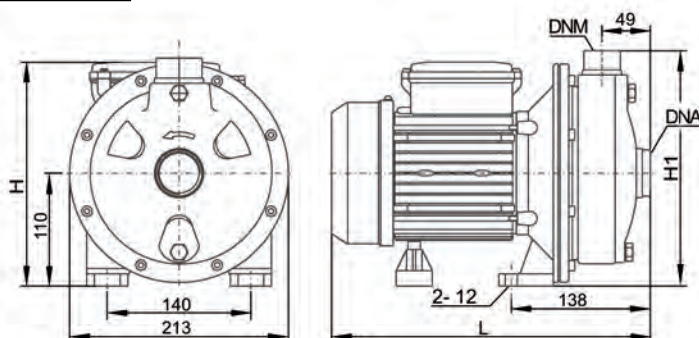
Working Conditions

- Medium temperature: $-20^{\circ}\text{C} \sim +104^{\circ}\text{C}$
- Environmental temperature: $\leq 50^{\circ}\text{C}$
- Maximum working pressure: 0.8MPa

Dimensions

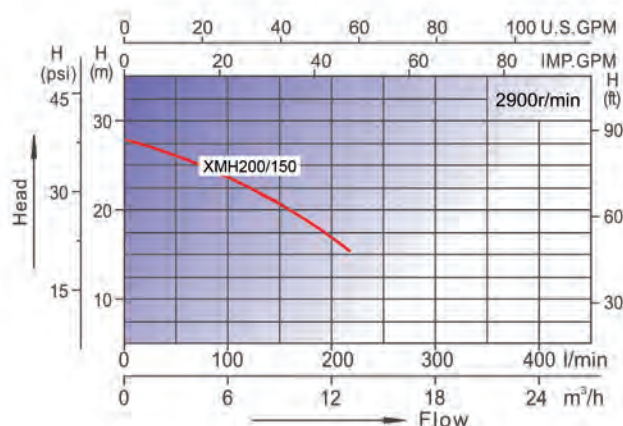
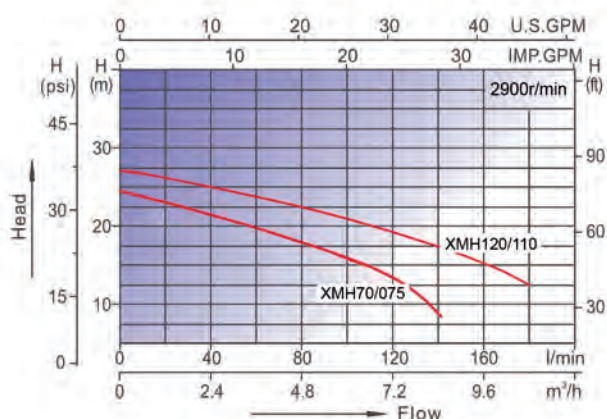


XMH Series



Model	Shape Size		
	L	H	H1
XMH70/075	315	218	232
XMH120/110	337	230	232
XMH200/150	366	255	222

Performance Curves



Specification

Model	Power P2 (kW)	Amps 220V/50Hz (A)	Max Head (m)	Max Flow (m³/h)	DNA	DNM	Weight (kg)	Packing Size (mm)
XMH70/075	0.75	5.2	25	8.4	G1¼	G1	10.6	360x245x280
XMH120/110	1.1	7.0	28	10.8	G1¼	G1	12.8	535x255x325
XMH200/150	1.5	9.2	28	13	G1½	G1	19.1	420x260x295

AUTOMATIC BOOSTER PUMP - TQP SERIES HORIZONTAL SUBMERSIBLE PUMP - SPH400

General Data

TQP

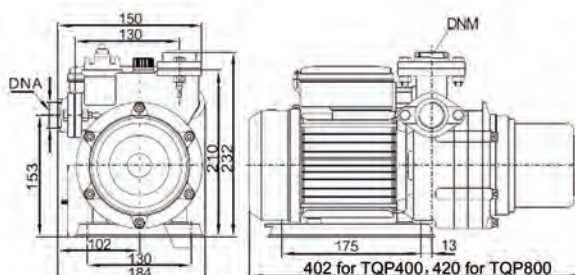
Features

The flow switch equipped with TQP pump can prevent the pump from continuously starting and stopping under small discharge, and provide stable water supply.

Working Conditions

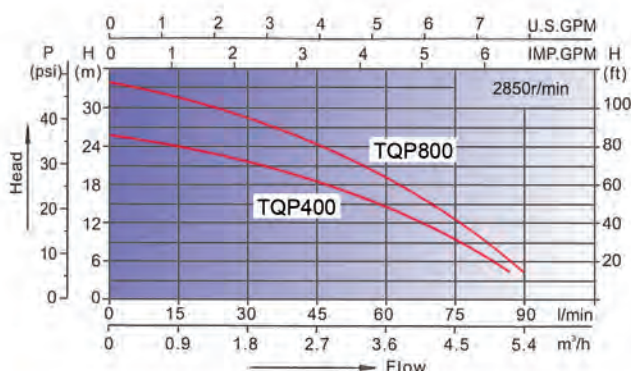
- Medium temperature: $0^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- Environmental temperature: $\leq 50^{\circ}\text{C}$
- Maximum working pressure: 0.5MPa

Dimensions



TQP Series

Performance Curves



Specification

Model	Power P2 (kW)	Amps 220V 50Hz (A)	Max Head (m)	Max Flow (m³/h)	DNA	DNM	Starting Pressure (MPa)	Packing Size (mm)
TQP400	0.40	2.7	25	5.0	G1	G1	0.16	430x210x285
TQP800	0.55	3.8	33	5.4	G1	G1	0.2	440x210x285

General Data

SPH400

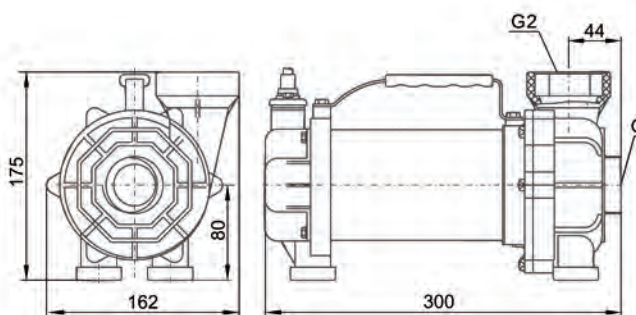
Features

- Use in garden sprinkling
- Use in aquaculture

Working Conditions

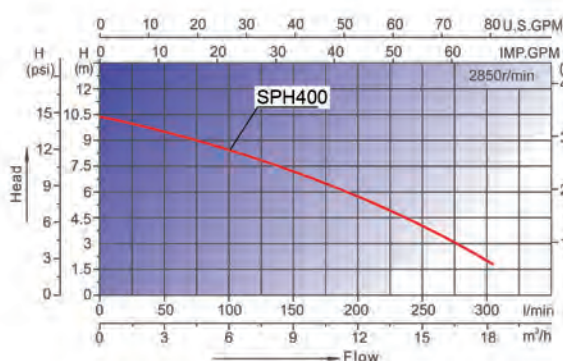
- Medium temperature: $\leq 40^{\circ}\text{C}$
- The maximum diameter of solid impurities: 20mm
- The diving depth should be less than: 5m

Dimensions



SPH400

Performance Curves



Specification

Model	Power P2 (kW)	Amps 220V 50Hz (A)	Max Head (m)	Max Flow (m³/h)	Inlet	Outlet	Weight (kg)	Packing Size (mm)
SPH400	0.4	3.8	10	18	G1½	G2	8	325x180x225

General Data

SQPS / STPS

Features

- Use in mariculture circulation filter, recirculation of water in swimming pool equipment

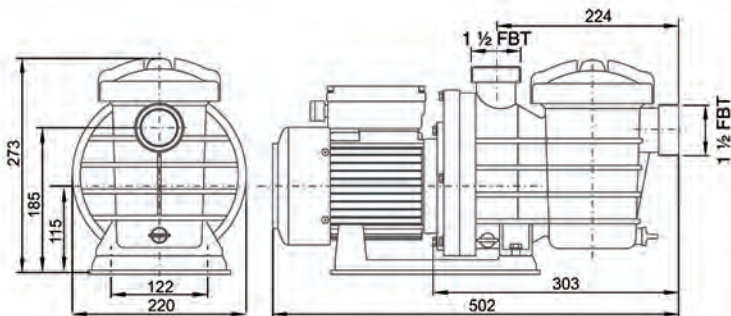
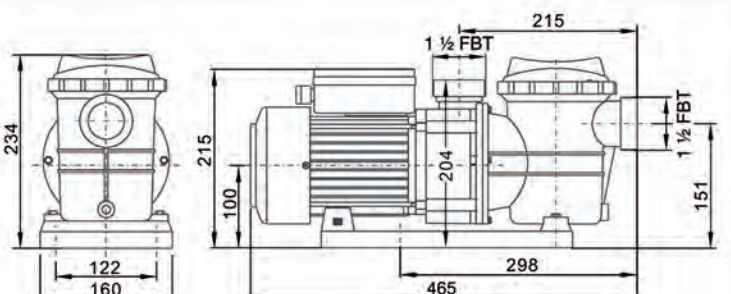
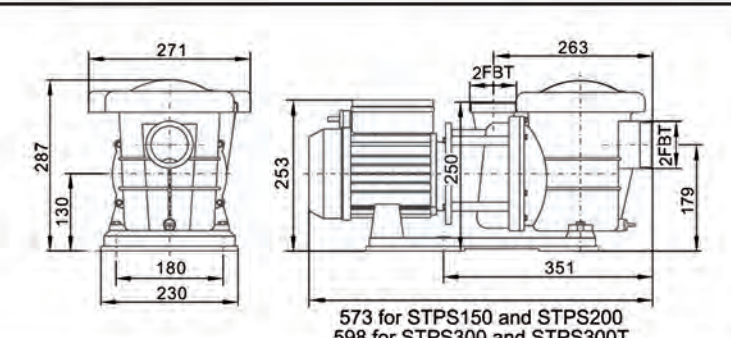
Working Conditions

- Medium temperature: $+5^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- Environmental temperature: $\leq 50^{\circ}\text{C}$
- Maximum working pressure: 0.3MPa

Materials

Mechanical seal and shaft: Stainless Steel 316

Dimensions

SQPS Series 	 Technical drawings of the SQPS Series pump. Front view dimensions: 273 (total height), 185 (motor height), 115 (base height), 122 (motor width), 220 (total width). Side view dimensions: 224 (total width), 1 1/2 FBT (top outlet), 1 1/2 FBT (side outlet), 502 (motor length), 303 (pump body length).
STPS100 	 Technical drawings of the STPS100 pump. Front view dimensions: 234 (total height), 122 (motor width), 160 (total width). Side view dimensions: 215 (total width), 1 1/2 FBT (top outlet), 1 1/2 FBT (side outlet), 100 (motor length), 298 (pump body length), 465 (total length), 151 (pump body height).
STPS150 / STPS200 / STPS300 / STPS300T 	 Technical drawings of the STPS150, STPS200, STPS300, and STPS300T pumps. Front view dimensions: 271 (total width), 287 (total height), 130 (base height), 180 (motor width), 230 (total width). Side view dimensions: 263 (total width), 2FBT (top outlet), 2FBT (side outlet), 253 (motor length), 351 (pump body length), 179 (pump body height). 573 for STPS150 and STPS200 598 for STPS300 and STPS300T

Specification

Model	Qmax (l/min)	Hmax (m)	Voltage / Frequency (V/Hz)	Power		Amps (A)	Fitting Size (inch)	Weight (kg)	Packing Size (mm)
				(kW)	(HP)				
SQPS100	310	14.5	220-240/50Hz	0.75	1.0	3.8	G1.5"	11.4	535x255x325
SQPS150	350	17.5	220-240/50Hz	1.1	1.5	5.8	G1.5"	12.8	535x255x325
STPS100	275	11	220-240/50Hz	0.75	1.0	3.8	G1.5"	9.5	495x195x295
STPS150	430	16.5	220-240/50Hz	1.1	1.5	5.8	G1.5"	14	605x305x350
STPS200	520	18	220-240/50Hz	1.5	2.0	7.0	G2"	15.5	605x305x350
STPS300	635	19.5	220-240/50Hz	2.2	3.0	10	G2"	18	630x305x350
STPS300T	635	19.5	380V/50Hz	2.2	3.0	10	G2"	18	630x305x350

General Data

SPA

Features

- **SPA100S / SPA200S:** Use in mariculture circulation filter
- **SPA300S / SPA300T:** Use in mariculture circulation filter, recirculation of water in bathtub pump or SPA equipment
- **SPA400T:** Use in mariculture circulation filter, recirculation of water in swimming pool equipment

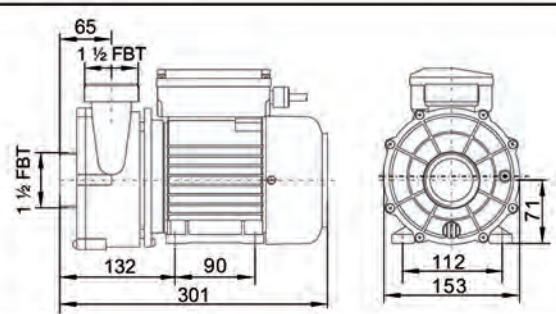
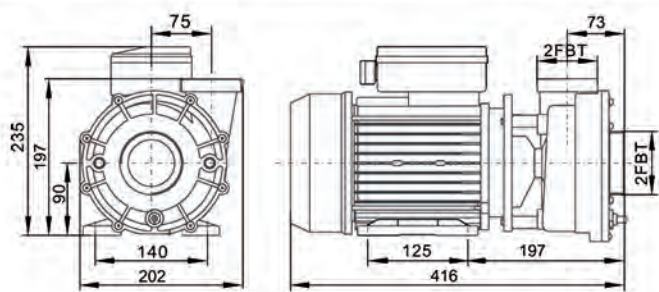
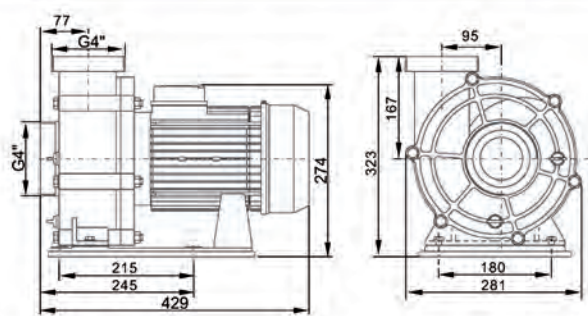
Working Conditions

- **Medium temperature:** $+5^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- **Environmental temperature:** $\leq 50^{\circ}\text{C}$
- **Maximum working pressure:** 0.3MPa

Materials

Mechanical seal and shaft: Stainless Steel 316

Dimensions

SPA100S / SPA200S		
SPA300S / SPA300T		
SPA400T		

Specification

Model	Qmax (l/min)	Hmax (m)	Voltage / Frequency (V/Hz)	Power		Amps (A)	Fitting Size (inch)	Weight (kg)	Packing Size (mm)
				(kW)	(HP)				
SPA100S	460	10.5	220-240/50Hz	0.75	1.0	3.8	G1.5"	8.3	325x190x250
SPA200S	620	16	220-240/50Hz	1.5	2.0	7.0	G1.5"	10	325x190x250
SPA300S	730	18	220-240/50Hz	2.2	3.0	10	G2"	18	460x235x295
SPA300T	730	18	380V/50Hz	2.2	3.0	10	G2"	18	460x235x295
SPA400T	1500	17.5	380V/50Hz	4.0	5.5	7.0	G4"	25.6	475x310x360

General Data

R95

Features

- *Electrical submersible multistage pumps R95 series are for raising clean water from wells, primary water supplying tanks and reservoirs.*
- *R95-S, R95-A, R95-VC and R95-BF series are in radial floating impellers.*
- *R95-DP, R95-MA and R95-DG series are in semi-axial impellers.*

Applications

- *Lifting clean and clear water in wells*
- *Domestic, civil and industrial applications.*
- *Water supply*
- *Irrigation*
- *Washdown systems*
- *Pressure boosting*

Operating Conditions

- *Water temperature: from +1 °C to +35 °C*
- *Maximum permissible quantity of suspended sand: 100 g/cm³*
- *Maximum submerged depth: 150m*
- *Maximum starts per hour: 30 at regular intervals*
- *Continuous or intermittent duty*

Power Range

- *From 0.37 kW to 7.5 kw, 50Hz*



Specificaton

4" R95

Electrical submersibles are with radial or semi-axial impellers. The impellers and the diffusers are in plastic material (noryl), whereas the bearings are in ceramic/rubber lubricated by the water circulation. Check valve is incorporated in the delivery body with threaded outlet. The coupling pump-motor is according to NEMA regulations.

4"



m³/24h	NO.	Type	Motor		Single-Phase	Three-Phase	Capacity			Outlet	Well Diameter							
			HP	kW	A	A	m³/h											
40 m³	1	R95-S-08	0.5	0.37	3.6	1.8	0.6m³ / 67m	1.2m³ / 59m	1.8m³ / 46m	30mm 1" 1/4G	100 mm							
	2	R95-S-12	0.75	0.55	4.8	2	0.6m³ / 98m	1.2m³ / 86m	1.8m³ / 68m									
	3	R95-S-14	1	0.75	6.3	2.5	0.6m³ / 114m	1.2m³ / 101m	1.8m³ / 80m									
	4	R95-S-16	1.5	1.1	8.6	3.4	0.6m³ / 131m	1.2m³ / 115m	1.8m³ / 90m									
	5	R95-S-22	2	1.5	10	4.4	0.6m³ / 180m	1.2m³ / 158m	1.8m³ / 124m									
	6	R95-S-28	3	2.2	14	6.2	0.6m³ / 229m	1.2m³ / 203m	1.8m³ / 158m									
60 m³	7	R95-A-06	0.5	0.37	3.6	1.8	1.5m³ / 43m	2m³ / 40m	3m³ / 30m			40mm 1" 1/2G	100 mm					
	8	R95-A-08	0.75	0.55	4.8	2	1.5m³ / 60m	2m³ / 56m	3m³ / 42m									
	9	R95-A-12	1	0.75	6.3	2.5	1.5m³ / 89m	2m³ / 83m	3m³ / 62m									
	10	R95-A-16	1.5	1.1	8.6	3.4	1.5m³ / 116m	2m³ / 109m	3m³ / 81m									
	11	R95-A-20	2	1.5	10	4.4	1.5m³ / 146m	2m³ / 137m	3m³ / 102m									
	12	R95-A-30	3	2.2	14	6.2	1.5m³ / 214m	2m³ / 200m	3m³ / 142m									
	13	R95-A-40	4	3	-	8.3	1.5m³ / 281m	2m³ / 254m	3m³ / 180m									
	14	R95-A-50	5.5	4	-	10.3	1.5m³ / 330m	2m³ / 310m	3m³ / 235m									
100 m³	15	R95-VC-06	0.75	0.55	4.8	2	3m³ / 35m	4m³ / 30m	5m³ / 22m	40mm 1" 1/2G				100 mm				
	16	R95-VC-09	1	0.75	6.3	2.5	3m³ / 46m	4m³ / 39m	5m³ / 27m									
	17	R95-VC-12	1.5	1.1	8.6	3.4	3m³ / 69m	4m³ / 60m	5m³ / 43m									
	18	R95-VC-16	2	1.5	10	4.4	3m³ / 90m	4m³ / 80m	5m³ / 58m									
	19	R95-VC-20	3	2.2	14	6.2	3m³ / 115m	4m³ / 100m	5m³ / 70m									
	20	R95-VC-24	4	3	-	8.3	3m³ / 138m	4m³ / 120m	5m³ / 86m									
	21	R95-VC-30	4	3	-	8.3	3m³ / 165m	4m³ / 140m	5m³ / 102m									
	22	R95-VC-40	5.5	4	-	10.3	3m³ / 210m	4m³ / 180m	5m³ / 129m									
	23	R95-VC-55	7.5	5.5	-	14	3m³ / 287m	4m³ / 255m	5m³ / 180m									
	24	R95-VC-75	10	7.5	-	18.5	3m³ / 375m	4m³ / 340m	5m³ / 245m									
150 m³	25	R95-BF-06	1	0.75	4.8	2.5	4m³ / 36m	6m³ / 28m	7m³ / 20m			40mm 1" 1/2G			100 mm			
	26	R95-BF-09	1.5	1.1	8.6	3.4	4m³ / 53m	6m³ / 40m	7m³ / 30m									
	27	R95-BF-11	2	1.5	10	4.4	4m³ / 65m	6m³ / 47m	7m³ / 33m									
	28	R95-BF-13	2	1.5	10	4.4	4m³ / 78m	6m³ / 59m	7m³ / 40m									
	29	R95-BF-18	3	2.2	14	6.2	4m³ / 108m	6m³ / 83m	7m³ / 57m									
	30	R95-BF-23	4	3	-	8.3	4m³ / 152m	6m³ / 110m	7m³ / 85m									
	31	R95-BF-32	5.5	4	-	10.3	4m³ / 190m	6m³ / 144m	7m³ / 103m									
	32	R95-BF-40	7.5	5.5	-	13.7	4m³ / 235m	6m³ / 176m	7m³ / 127m									
	33	R95-BF-56	10	7.5	-	18.5	4m³ / 309m	6m³ / 213m	7m³ / 148m									
	34	R95-DF-08	2	1.5	10	4.4	6m³ / 44m	8m³ / 35m	10m³ / 24m	50mm 2" G						100 mm		
35	R95-DF-13	3	2.2	14	6.2	6m³ / 75m	8m³ / 61m	10m³ / 43m										
36	R95-DF-17	4	3	-	8.3	6m³ / 100m	8m³ / 84m	10m³ / 59m										
37	R95-DF-20	4	3	-	8.6	6m³ / 118m	8m³ / 96m	10m³ / 68m										
38	R95-DF-24	5.5	4	-	10.3	6m³ / 141m	8m³ / 118m	10m³ / 86m										
39	R95-DF-30	7.5	5.5	-	13.7	6m³ / 169m	8m³ / 143m	10m³ / 98m										
40	R95-DF-35	10	7.5	-	18.5	6m³ / 205m	8m³ / 171m	10m³ / 118m										
300 m³	41	R95-MA-07	2	1.5	10	4.4	8m³ / 29m	10m³ / 26m	14m³ / 20m			50mm 2" G					100 mm	
	42	R95-MA-10	3	2.2	14	6.2	8m³ / 44m	10m³ / 39m	14m³ / 29m									
	43	R95-MA-13	4	3	-	8.3	8m³ / 61m	10m³ / 56m	14m³ / 43m									
	44	R95-MA-17	5.5	4	-	10.3	8m³ / 82m	10m³ / 75m	14m³ / 59m									
	45	R95-MA-22	7.5	5.5	-	13.7	8m³ / 109m	10m³ / 100m	14m³ / 79m									
	46	R95-MA-28	10	7.5	-	18.5	8m³ / 142m	10m³ / 130m	14m³ / 102m									
400 m³	47	R95-DG-07	3	2.2	14	6.2	12m³ / 31m	16m³ / 25m	20m³ / 19m									50mm 2" G
	48	R95-DG-10	4	3	-	8.3	12m³ / 44m	16m³ / 36m	20m³ / 28m									
	49	R95-DG-14	5.5	4	-	10.3	12m³ / 62m	16m³ / 50m	20m³ / 36m									
	50	R95-DG-18	7.5	5.5	-	13.7	12m³ / 79m	16m³ / 63m	20m³ / 59m									
	51	R95-DG-21	10	7.5	-	18.5	12m³ / 93m	16m³ / 75m	20m³ / 68m									
	52	R95-DG-24	10	7.5	-	18.5	12m³ / 114m	16m³ / 94m	20m³ / 83m									

Job Reference for Apema

- Centre for Health Protection (衛生防護中心): CVF10-6 x 4pcs
Application (應用範圍): Washroom Water Lifting Pump (廁所上水泵)
- Kam Wah House at Waterloo Road (窩打老道金華樓): CVF5-8T x 2pcs
Application (應用範圍): Fresh Water Pump (食水泵)
- Chun Wo Construction (俊和建築): CVF10-22T x 4pcs
Application (應用範圍): Construction Site Water Tank (地盤用水缸)
- Tung Fai Gardens at Po Yan Street at Sheung Wan (上環普仁街東輝花園): CVF10-16T x 1pc
Application (應用範圍): Fresh Water Pump (食水泵)
- FUJITA Airport (FUJITA 機場): CVF32-8T x 1pc
Application (應用範圍): Use in Engineering Department (工程部用).
- Laws Commercial Plaza at Cheung Sha Wan (長沙灣道羅氏商業廣場): CVF10-16T x 1pc
Application (應用範圍): Washroom Water Lifting Pump (廁所上水泵)
- Wing Hong Factory Building at Kwai Fung Crescent (葵豐街永康工業大廈): CVF10-4T x 1pc
Application (應用範圍): 220V Single Phase Fresh Water Pump (220V 單相食水泵)
- Ridon Building at Hai Tan Street (海壇街班寶大廈): CVF10-6T x 3pcs
Application (應用範圍): Fresh Water Pump (食水泵)
- Tuen Mun Marine Department (屯門海事處): CVF32-8T x 1pc
Application (應用範圍): Seawater use (海水用)
- Airport Engineering Department (機場工程部): CVF10-4T x 2pcs
Application (應用範圍): 220V Single Phase Fresh Water Pump (220V 單相食水泵)

GITRAL®

INTERCHANGEABLE MEMBRANE EXPENSION VESSELS FOR COLD WATER

**SPECIALISTE
FRANÇAIS
DES VASES
D'EXPANSION**

**16 MODELS
FROM 25
TO 1000 LTR**



- Horizontal and vertical models
- Necessary for water distribution, pressure increasing, obtaining a better regulation, increase of pump's life

WORKING:

Pressurized water is conducted by a pump into the Gitral expansion vessel. As water enters the membrane, the initial pressurized air volume - closed between the membrane and the steel wall - decreases and thus pressure increases. Once the desired pressure is reached, the pressure switch stops the pump and pressurized air fills the system with water.

The pump restarts working as soon as the pressure switch records the set minimum pressure.

- Maximum working pressure = 10 bar.
- Pre-charge pressure = 1.5 bar.

CONSTRUCTION:

- As water is in contact with the membrane only, steel parts of the expansion tanks are not subject to corrosion.
- Rubber membrane construction according to alimentary hygienic specifications.
- Easily interchangeable membrane.

HORIZONTAL VESSELS WITH BRACKET FOR PUMP:

Adaptable for various pumps models



Ref.	Capacity (litre)	H (mm)	L (mm)	Weight (kg)	Connction ØR
VHEF 25	25	290	411	5.2	1" male
VHEF 50	50	410	610	13	1" male
VHEF 80	80	480	690	17.5	1" male
VHEF 100	100	480	780	19	1" male
VHEF 200	200	580	1075	44	1" - ½ male
VHEF 300	300	660	1230	55	1" - ½ male

VERTICAL VESSELS WITH FEET



Ref.	Capacity (litre)	ØA (mm)	H (mm)	H1 (mm)	Weight (kg)	Connction ØR
VVEF 25 SF	25	362	355	--	4.6	1" male
VVEF 25	25	270	411	--	4.5	1" male
VVEF 50	50	380	790	175	13.5	1" male
VVEF 80	80	450	850	153	17.5	1" male
VVEF 100	100	450	930	153	21	1" male
VVEF 200	200	550	1285	210	47	1" - ½ male
VVEF 300	300	630	1415	188	61	1" - ½ male
VVEF 500	500	750	1610	188	88	1" - ½ male
VVEF 750	750	750	2125	150	143	1" - ½ male
VVEF 100	1000	850	2150	120	209	1" - ½ male

GITRAL®

JOB REFERENCE FOR GITRAL:

- Villa Oceania at On Chun Street at Ma On Shan (馬鞍山鞍駿街海典居):
300L Fresh Water Tank (300L 食水壓力缸) x 2pcs
- Villa Oceania at On Chun Street at Ma On Shan (馬鞍山鞍駿街海典居):
500L Fresh Water Tank (500L 食水壓力缸) x 2pcs
- Wing Hong Factory Building at Kwai Fung Crescent (葵豐街永康工業大廈):
100L Fresh Water Tank (100L 食水壓力缸) x 1pc
- Buddhist Kok Kwong Secondary School at Sha Kok Estate (沙角村佛教覺光法師中學):
300L Flush Water Tank (300L 咸水壓力缸) x 1pc
- Airport Engineering Department (機場工程部):
100L Fresh Water Tank (100L 食水壓力缸) x 1pc
- Tin Shui Wai New Hospital (天水圍新醫院):
300L Fresh Water Tank (300L 食水壓力缸) x 2pcs
- Tin Shui Wai New Hospital (天水圍新醫院):
300L Flush Water Tank (300L 咸水壓力缸) x 2pcs.
- Hong Chi School at Fanling (粉嶺匡智學校):
200L Fresh Water Tank (200L 食水壓力缸) x 1pc



This certifies that

GITRAL

*has had the undermentioned product examined, tested
and found, when correctly installed, to comply with
the requirements of the United Kingdom Water Supply
(Water Fittings) Regulations/Scottish Water Byelaws.*

VVEF-HP RANGE OF EXPANSION VESSELS

*This certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current
status of an approval must be obtained from the WRAS Directory (www.wras.co.uk/directory)*

*The product so mentioned will be listed in the
Water Fittings and Materials Directory
for a period until:*

31 JULY 2019

1407074

Certificate No.

A handwritten signature in black ink, appearing to read 'R. Dacey', is positioned above the title of the Chairman.

Chairman, Product Approval Group

A handwritten signature in black ink, appearing to read 'J. Arnold', is positioned above the title of the Secretary.

Secretary

WRAS
**APPROVED
PRODUCT**

November 2010



ANTI-WATER HAMMER MEMBRANE TANKS

Use

- Overpressure reducer in hydraulic systems
- Hot and cold sanitary water circuits
- Pressurizing systems
- Refrigeration circuits

Material

- Flange: Stainless Steel 304 available

Maximum Working Pressure

- 16 Bar

AFC/CAR 16 Bar

Code	Model	Dimeter	Height	Water entry connection	Rubber membrane	Standard pre-loading pressure	Maximum working pressure	Working temperature	External finishing colour
		Ø mm	(H) mm	G		Bar	Bar	°C	
580012	AFC/CAR CE 12	265	315	M 3/4"Gas	BUTYL	3.5	16.0	-10 +100	Grey
580018	AFC/CAR CE 18	265	375						
580024	AFC/CAR CE 24	265	490						

AFE/CAR 16 Bar

680035	AFE/CAR CE 35	380	475	M 1"Gas	EPDM	2.5	16.0	-10 +100	Blue
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AFC/CAR



AFE/CAR 35

** Other flange sizes available. Subject to quote.

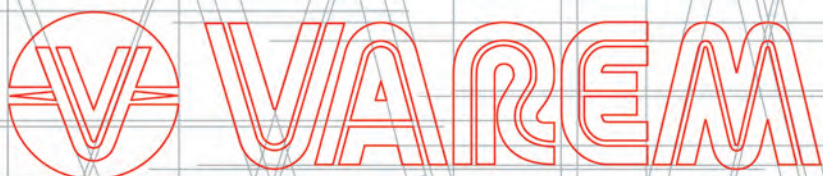
不銹鋼法蘭尺寸可按客戶要求訂造。

WRAS



Pressure Tank

MAXIVAREM LS CE





ULTRA-PRO



Expansion Vessels

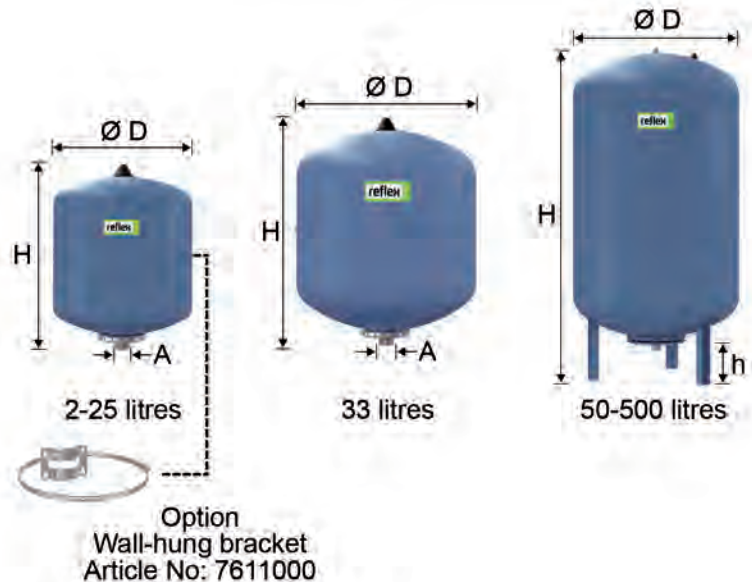
10 bar

reflex

Thinking solutions.

Reflex DE

- For systems not subject to DIN 1988 requirements, e.g. fire-extinguishing and service water systems, geothermal energy
- For potable water, water heating and hydro-pneumatic well applications
- Bladder according to DIN EN 13831 norm part 3
- From 50 litres volume with replaceable bladder
- All vessel parts in contact with water are coated against corrosion
- Meets or exceeds EC norms for pressure vessels 97/23/EC
- Fitted with manometer from Ø 1000 mm
- Threaded connections up to 1000 litres
- Flanged connections above 1000 litres
- 3000 to 10000 litres with upper flange
- Durable epoxy coating
- Factory pre-pressurised gas chamber (Nitrogen)
- Vessels with WRAS-and/or ACS-certification upon request



CE WRAS APPROVED PRODUCT ACS

10 bar

Type 10 bar / 70°C	Article No Blue	Material Group	PU	Weight kg	Ø D mm	H mm	h mm	A
DE 2	7200300	40	288	1.0	132	260	-	G ¾
DE 8	7301000	40	96	1.8	206	335	-	G ¾
DE 12	7302000	40	72	2.4	280	307	-	G ¾
DE 18	7303000	40	56	3.2	280	410	-	G ¾
DE 25	7304000	40	42	3.8	280	520	-	G ¾
DE 33	7303900	40	24	5.7	354	454	-	G ¾
DE 33 ¹⁾	7305500	40	24	6.5	354	520	-	G ¾
DE 50	7306005	42	20	9.5	409	604	66	G 1
DE 60	7306400	42	18	11.2	409	734	102	G 1
DE 80	7306500	42	10	14.0	480	745	153	G 1
DE 100	7306600	42	10	16.0	480	850	153	G 1
DE 200	7306700	42	4	36.5	634	967	153	G 1 ¼
DE 300	7306800	42	-	41.5	634	1267	150	G 1 ¼
DE 400	7306850	42	-	73.0	740	1245	150	G 1 ¼
DE 500	7306900	42	-	103.0	740	1475	139	G 1 ¼
DE 600	7306950	42	-	128.0	740	1859	133	G 1 ½
DE 800	7306960	42	-	176.0	740	2325	263	G 1 ½
DE 1000 Ø 740	7306970	42	-	214.0	740	2804	263	G 1 ½
DE 1000 Ø 1000	7311405	44	-	427.0	1000	2001	286	DN 65/PN 16
DE 1500	7311605	44	-	542.0	1200	1991	291	DN 65/PN 16
DE 2000	7311705	44	-	717.0	1200	2451	291	DN 65/PN 16
DE 3000	7311805	44	-	962.0	1500	2521	320	DN 65/PN 16
DE 4000	7354000	44	-	1085.0	1500	3070	320	DN 65/PN 16
DE 5000	7354200	44	-	1050.0	1500	3635	320	DN 65/PN 16
DE 8000	Upon Request	44	-	1750.0	1500	5404	236	DN 100/PN 16
DE 10000		44	-	1750.0	1500	6560	236	DN 100/PN 16

¹⁾ with legs