

# Apema

Tecnología de la bomba de agua



## **APE series**

**Stainless Steel**

**Vertical Multistage Centrifugal Pumps**

# APEMA WATER PUMPS

## APE SERIES: APE4, APE8, APE16, APE32

### General Information

#### Pump

The APE series water pumps are non-self-priming, vertical multistage centrifugal pumps. The base is an in-line design with suction and discharge ports in the same horizontal plane. The pump body and the outer sleeve are secured between the base and the pump head by means of staybolts. The pumps are available in various sizes and various number of stages to provide the required flow and pressure. Pump material of stainless steel 304 or 316L is available.

#### Applicable Medium

The pumps are suitable for transporting clean, thin and non-explosive liquids without solid particles. The liquids must be chemically non-aggressive to the pump materials. When transferring liquid with a density or viscosity higher than that of water, motor with correspondingly higher outputs must be used, if required.

#### Operating Conditions

Liquid Temperature:	-15 °C to +110 °C
Maximum Ambient Temperature:	+40 °C
Maximum Suction Pressure:	According to NPSH and 0.5m water head

#### Electrical Motor

Electricity:	380/3/50
Insulation Class:	F
Protection Class:	IP55
Motor Case:	Motor with power of 11kW or bigger are in cast iron, others are in aluminum

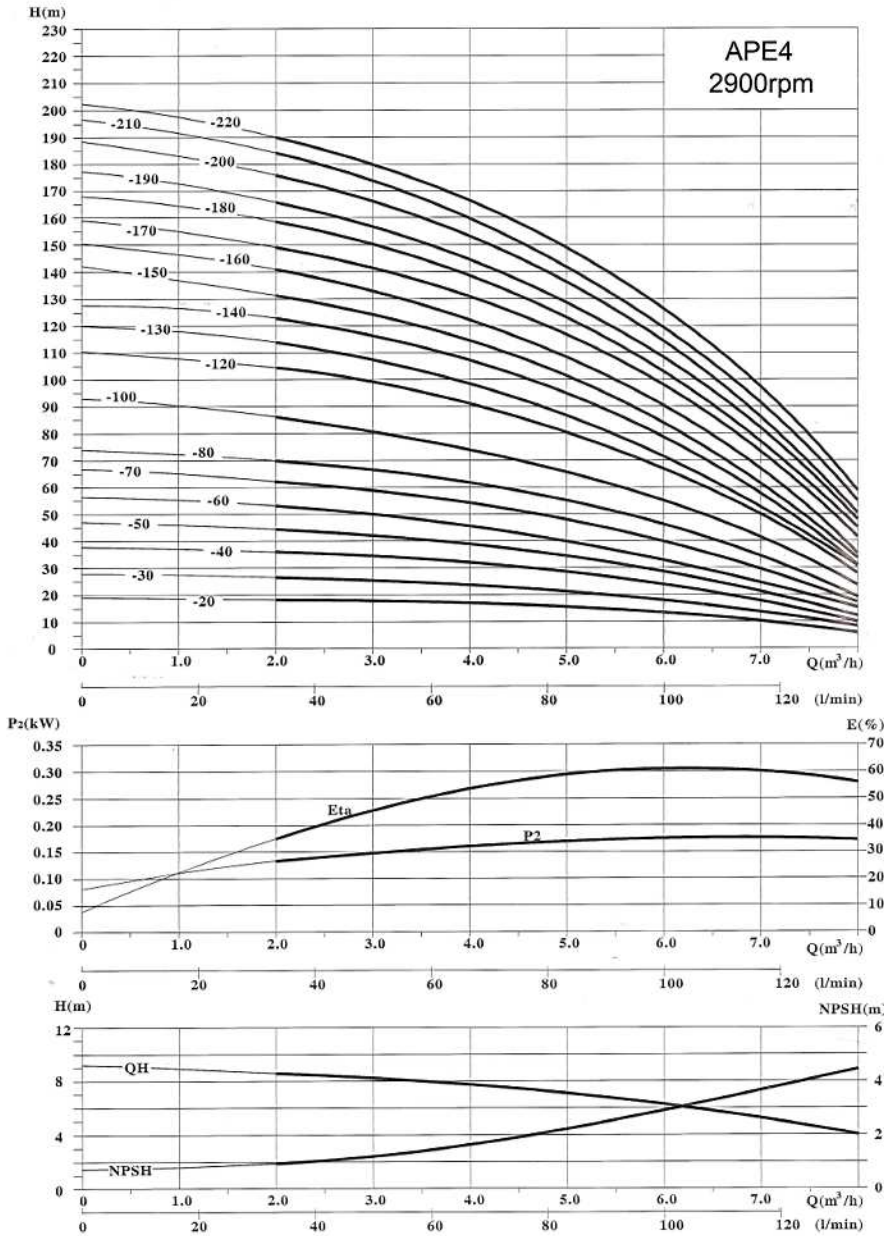
#### Applications

- Water Supply System
- Pure Water Treating Systems
- Washing and Sprinkling

#### Product Range

Model	APE4	APE8	APE16	APE32
Rated Flow Rate (m <sup>3</sup> /h)	4	8	16	32
Flow Range (m <sup>3</sup> /h)	2 - 8	5 - 12	8 - 22	16 - 40
Maximum Pressure (bar)	22	21	21	26
Motor Power (kW)	0.55 - 4	0.75 - 7.5	2.2 - 15	1.5 - 30
Liquid Temperature (°C)	-15 to +110			
Maximum Efficiency (%)	60	63	68	76
Pipe Connection				
Flange	DN32	DN40	DN50	DN80
Pipe Thread	ZG1 1/4	ZG1 1/2	ZG2	-----
Cutting Ferrule Joint	DN32	DN50	DN50	-----

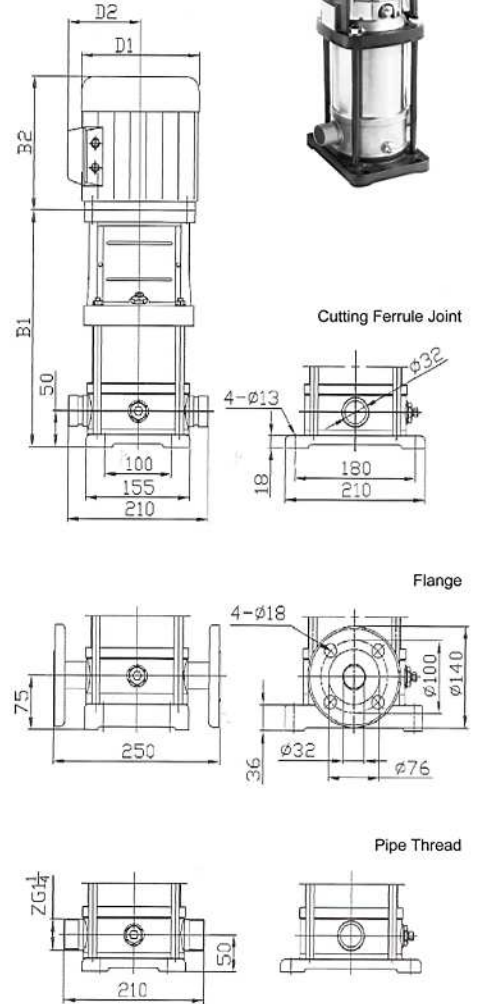
## Performance Curves



## Mechanical Sketch

### Connections

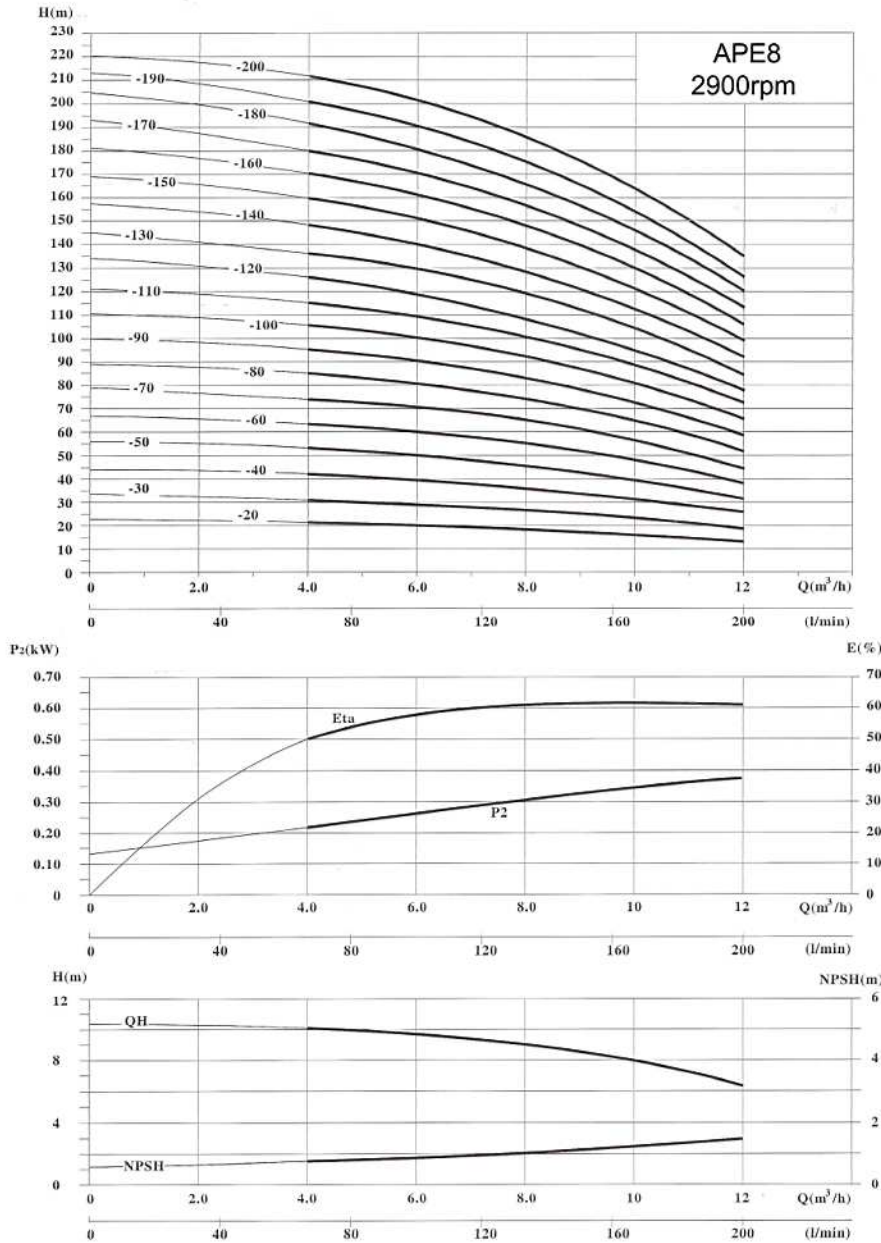
Bayonet Lock	DN32
Flange	DN32
Male Threads	ZG1 1/4



## Performance Data

Model	Power		Flow Rate								Dimensions					Weight
	Three Phase	Power	l/min	33.3	50.0	66.7	83.3	100.0	116.7	133.3	mm					
380V / 50Hz	kW	HP	m³/h	2	3	4	5	6	7	8	B1	B2	B1+B2	D1	D2	kg
APE4-20	0.55	0.75	18	17	16	15	14	10	6	273	235	508	140	105	26	
APE4-30	0.75	1.0	26	25	24	22.5	20	12	7.5	300	265	565	156.6	110	30	
APE4-40	0.75	1.0	35	33.5	32	29.5	26.5	16	10	327	265	592	156.6	110	30	
APE4-50	1.1	1.5	43	40	37	33	28	23	12	354	265	619	156.6	110	33	
APE4-60	1.1	1.5	52	50	45	41	34	25	14	381	265	646	156.6	110	33	
APE4-70	1.5	2.0	61	58	53	47.5	40	28	18	408	275	683	176.6	118	33.5	
APE4-80	1.5	2.0	70	66.5	61	54	46	32	21	435	275	710	176.6	118	33.5	
APE4-100	2.2	3.0	86	80	74	66	56	41	23	489	275	764	176.6	118	38	
APE4-120	2.2	3.0	105	99	91	82	68	47	27	543	275	818	176.6	118	38	
APE4-130	2.2	3.0	114	107	97.5	87	74	53	31	570	275	845	176.6	118	38	
APE4-140	2.2	3.0	123	116	106	93	79	56	33.5	597	275	872	176.6	118	38	
APE4-150	3.0	4.0	131	124	112.5	100	85.5	61	36	644	325	969	196.6	135	46.5	
APE4-160	3.0	4.0	142	133	122	111	93	67	38	661	325	986	196.6	135	46.5	
APE4-170	4.0	5.5	149	140	127.5	114	97	70	41	688	325	1013	196.6	135	53	
APE4-180	4.0	5.5	158	149	135	121	103	74	43	715	325	1040	196.6	135	53	
APE4-190	4.0	5.5	166	157	143	127.5	111	78	47	742	325	1067	196.6	135	53	
APE4-200	4.0	5.5	175	165	150	134	115	82	49	769	325	1094	196.6	135	53	
APE4-210	4.0	5.5	184	173	157.5	141	120	86	51	796	325	1121	196.6	135	53	
APE4-220	4.0	5.5	190	180	164	146	124	91	54	823	325	1148	196.6	135	53	

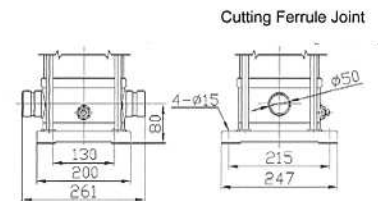
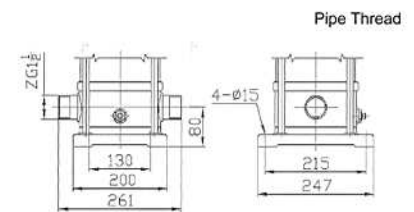
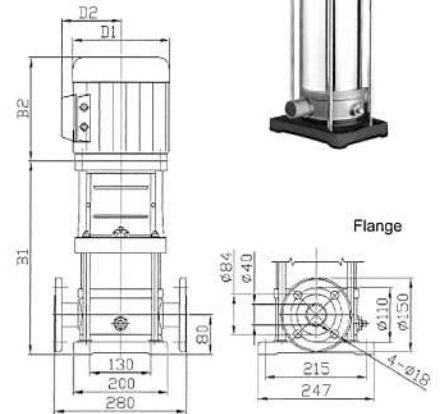
## Performance Curves



## Mechanical Sketch

### Connections

Bayonet Lock	DN50
Flange	DN40
Male Threads	ZG1 1/2

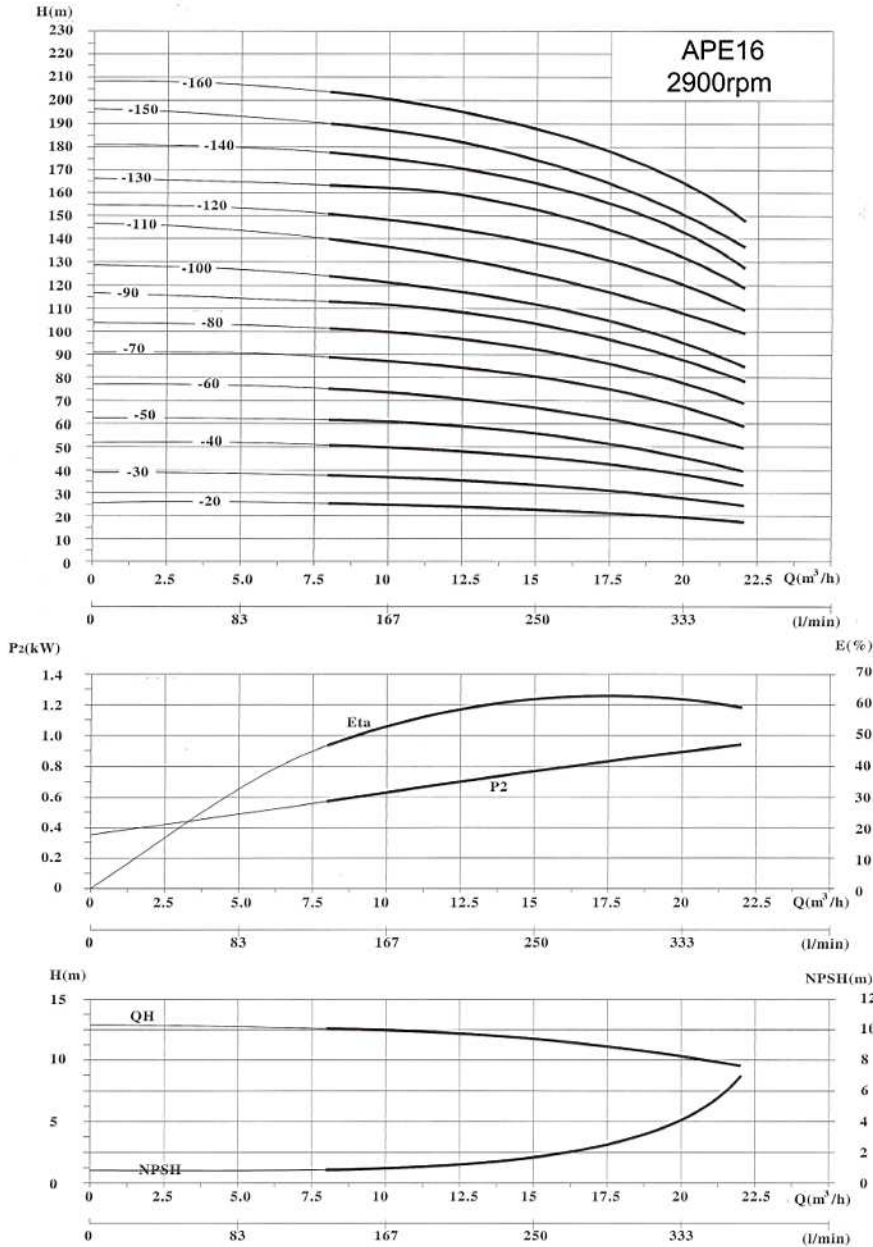


## Performance Data

Model	Power		Flow Rate								Dimensions					Weight	
			l/min	83	100	117	133	150	167	183	200	mm					
Three Phase 380V / 50Hz	kW	HP	m³/h	5	6	7	8	9	10	11	12	B1	B2	B1+B2	D1	D2	kg
APE8-20	0.75	1.0	Head (m)	20	19.5	19	18	17	16	14	13	376	265	641	156.6	110	35
APE8-30	1.1	1.5		30	29.5	28.5	27	25	24	21	19	406	265	671	156.6	110	38.5
APE8-40	1.5	2.0		41	39.5	38	36	34	32	28	26	436	275	711	176.6	118	46.5
APE8-50	2.2	3.0		52	50	48	45	42	40	36	32	466	275	741	176.6	118	50
APE8-60	2.2	3.0		62	60	57	54	51	48	43	39	496	275	771	176.6	118	50
APE8-70	3.0	4.0		72	70	68	65	61	57	51	46	526	325	851	196.6	135	59
APE8-80	3.0	4.0		83	80	77	73	69	65	58	52	566	325	891	196.6	135	59
APE8-90	4.0	5.5		93	90.5	87	84	78	73	66	59.5	596	325	921	196.6	135	69
APE8-100	4.0	5.5		104	100	97	92	87	81	73	65	626	325	951	196.6	135	69
APE8-110	4.0	5.5		113	110	107	102	96	89	80	73	656	325	981	196.6	135	69
APE8-120	4.0	5.5		124	120	116	111	104	92	87	78	686	325	1011	196.6	135	69
APE8-130	5.5	7.5		134	130.5	126	121	113	105	95	86	736	379	1115	255	157	95
APE8-140	5.5	7.5		145	141	136	130	122	113	102	92	766	379	1145	255	157	95
APE8-150	5.5	7.5		154.5	150	145.5	140	131	121.5	110	99	796	379	1175	255	157	95
APE8-160	5.5	7.5		166	161	156	148	139	130	118	106	826	379	1205	255	157	95
APE8-170	7.5	10		175	170	165	158	148	138	124	112	856	417	1273	255	157	110
APE8-180	7.5	10		187	182	175	167	157	146	134	120	886	417	1303	255	157	110
APE8-190	7.5	10		196	191	184	177	165	154	139	126	916	417	1333	255	157	110
APE8-200	7.5	10		208	202	195	186	175	163	150	135	946	417	1363	255	157	110

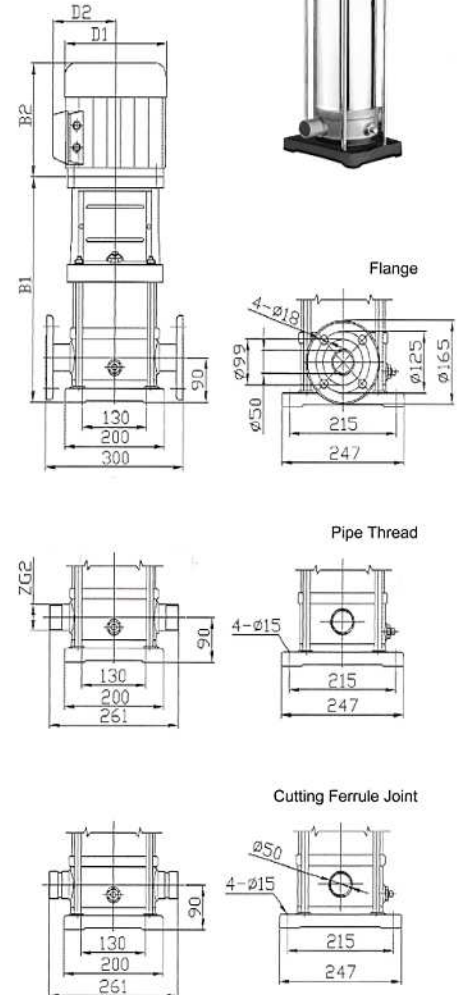
## Performance Curves

## Mechanical Sketch



### Connections

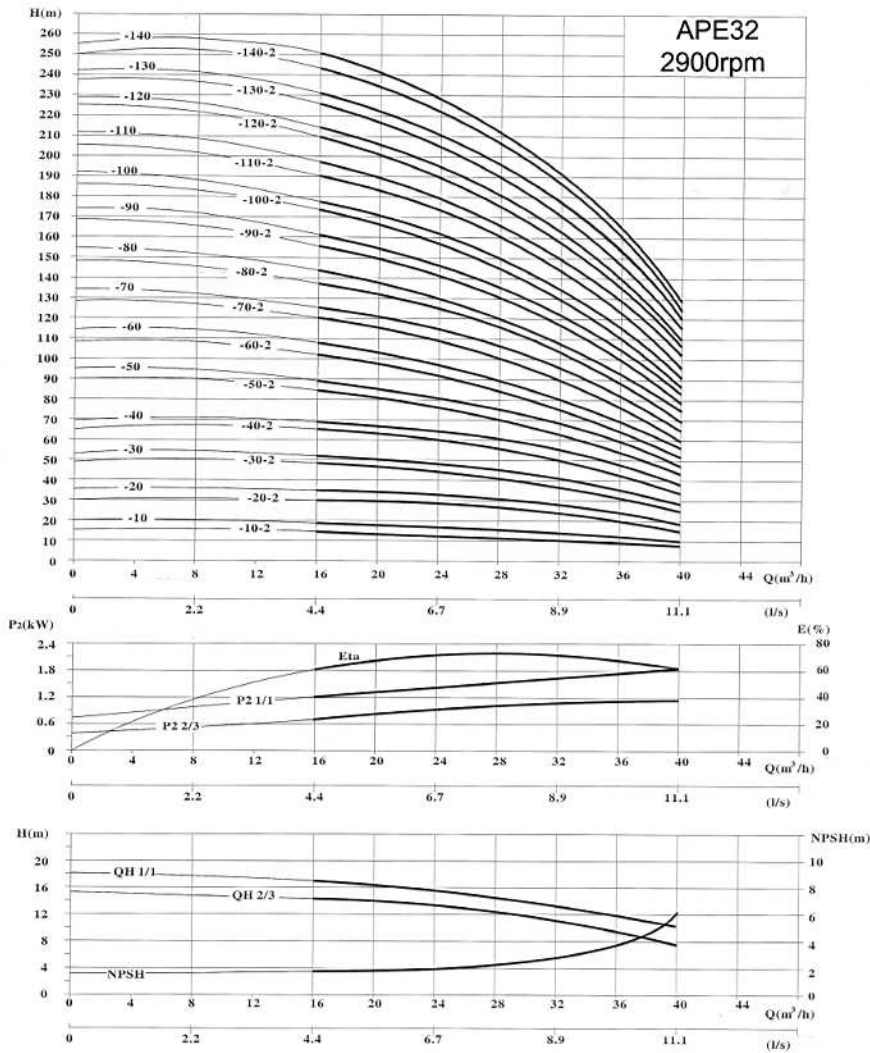
Bayonet Lock	DN50
Flange	DN50
Male Threads	ZG2



## Performance Data

Model	Power		Flow Rate								Dimensions					Weight			
	Three Phase 380V / 50Hz	kW	HP	l/min	133	167	200	233	267	300	333	367	B1	B2	B1+B2		D1	D2	mm
APE16-20	2.2	3.0		8	10	12	14	16	18	20	22	20	18	408	278	686	177	127	42
APE16-30	3.0	4.0		26	25	24	23	22	21	20	18	20	18	484	337	821	197	127	56
APE16-40	4.0	5.5		38	37	36	35	33	31	28	25	25	25	529	337	866	197	127	58
APE16-50	5.5	7.5		52	50	49	47	46	43	39	35	35	35	577	380	957	258	173	87
APE16-60	5.5	7.5		76	74	71	69	66	62	56	50	40	40	622	380	1002	258	173	89
APE16-70	7.5	10		89	87	85	82	78	74	69	60	60	60	667	380	1047	258	173	96
APE16-80	7.5	10		102	100	97	95	92	85	77	70	70	70	712	380	1092	258	173	102
APE16-90	11	15		114.5	112.5	109	107	104	98	91	80	80	80	785	485	1270	320	320	134
APE16-100	11	15		125	122	118	114	110	103	96	85	85	85	830	485	1315	320	320	136
APE16-110	11	15		140	138	133	131	127	120	113	98	98	98	875	485	1360	320	320	138
APE16-120	11	15		153	149	146	142	137	129	120	110	110	110	920	485	1405	320	320	140
APE16-130	15	20		165	163	157	155	150	143	133	118	118	118	965	485	1450	320	320	184
APE16-140	15	20		178	175	172	167	161	155	147	128	128	128	1010	485	1495	320	320	186
APE16-150	15	20		190.5	188	181.5	178.5	172.5	165	154	137	137	137	1055	485	1540	320	320	188
APE16-160	15	20		204	200	196	191	186	176	168	146	146	146	1100	485	1585	320	320	190

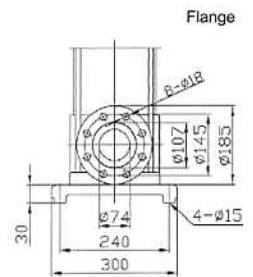
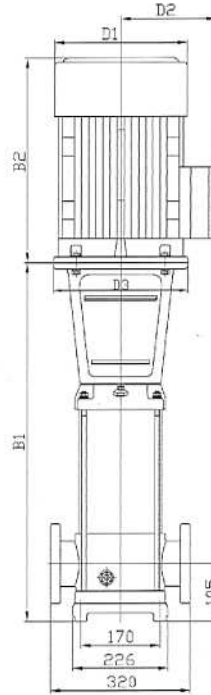
## Performance Curves



## Mechanical Sketch

### Connections

Movable Flange | DN80



## Performance Data

Model	Power		Flow Rate								Dimensions					Weight	
			mm														
	kW	HP	l/s	4.4	5.6	6.7	7.8	8.9	10.0	11.1	B1	B2	B1+B2	D1	D2		kg
Three Phase 380V / 50Hz			m³/h	16	20	24	28	32	36	40							
APE32-10-2	1.5	2.0	15	14.5	13.5	12.5	11	9	7	505	275	780	176.6	118	67.5		
APE32-10	2.2	3.0	18	17	16	15	14	12	9.5	505	290	795	190	155	71		
APE32-20-2	3.0	4.0	30	29	27	25	22	18	14	544	337	881	197	127	85		
APE32-20	4.0	5.5	36	34	32	30	28	24	18	575	335	910	230	188	84		
APE32-30-2	5.5	7.5	48	46	43	40	36	30	24	645	430	1075	260	208	93		
APE32-30	5.5	7.5	54	51	48	45	42	36	27	645	430	1075	260	208	93		
APE32-40-2	7.5	10	66	64	59	55	50	42	32	715	430	1145	260	208	102		
APE32-40	7.5	10	72	68	64	60	56	48	36	715	430	1145	260	208	102		
APE32-50-2	11	15	84	80	75	70	64	54	41	895	490	1385	330	255	172		
APE32-50	11	15	90	85	80	75	70	60	45	895	490	1385	330	255	172		
APE32-60-2	11	15	102	97	91	85	78	66	50	965	490	1455	330	255	176		
APE32-60	11	15	108	102	96	90	84	72	54	965	490	1455	330	255	176		
APE32-70-2	15	20	120	114	107	100	92	78	59	1035	490	1525	330	255	188		
APE32-70	15	20	126	119	112	105	98	84	63	1035	490	1525	330	255	188		
APE32-80-2	15	20	138	131	123	115	106	90	68	1105	490	1595	330	255	192		
APE32-80	15	20	144	136	128	120	112	96	72	1105	490	1595	330	255	192		
APE32-90-2	18.5	25	156	148	139	130	120	102	77	1175	550	1725	330	255	218		
APE32-90	18.5	25	162	153	144	135	126	108	81	1175	550	1725	330	255	218		
APE32-100-2	18.5	25	174	165	155	145	134	114	86	1245	550	1795	330	255	222		
APE32-100	18.5	25	180	170	160	150	140	120	90	1245	550	1795	330	255	222		
APE32-110-2	22	30	192	182	171	160	148	126	95	1315	590	1905	360	285	259		
APE32-110	22	30	198	187	176	165	154	132	99	1315	590	1905	360	285	259		
APE32-120-2	22	30	210	199	187	175	162	138	104	1385	590	1975	360	285	263		
APE32-120	22	30	216	204	192	180	168	144	108	1385	590	1975	360	285	263		
APE32-130-2	30	40	228	216	203	190	176	150	113	1455	660	2115	400	310	327		
APE32-130	30	40	234	221	208	195	182	156	117	1455	660	2115	400	310	327		
APE32-140-2	30	40	246	233	219	205	190	162	122	1525	660	2185	400	310	331		
APE32-140	30	40	252	238	224	210	196	168	126	1525	660	2185	400	310	331		