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PMP High quality vertical multi-stage pump



BERLINGTON PUMPS





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PMP1 PMPA108

PMP2 PMPA210

PMP3 PMPA312

PMP4 PMPA414

PMP5 PMPA516

PMP8 PMPA818

PMP10 PMPA1020

PMP12 PMPA1222

PMP16 PMPA1624

PMP20 PMPA2026

PMP32 PMPA3228

PMP45 PMPA4530

PMP64 PMPA6432

PMP90 PMPA9034

PMP120 PMPA12036

PMP150 PMPA15038

PMP200 PMPA20040



■ Features

PMP,PMPA series Stainless Steel Multistage Centrifugal Pump is a kind of non self-priming vertical multistage centrifugal pumps, which adopts classical vertical electric motor and assembly mechanical seal. It possesses many advantages, such as small volume, light weight, low noise, easy maintenance, elegant appearance etc. DBL Series are widely used in the areas of daily life, industry, agriculture, water treatment system, and so on.

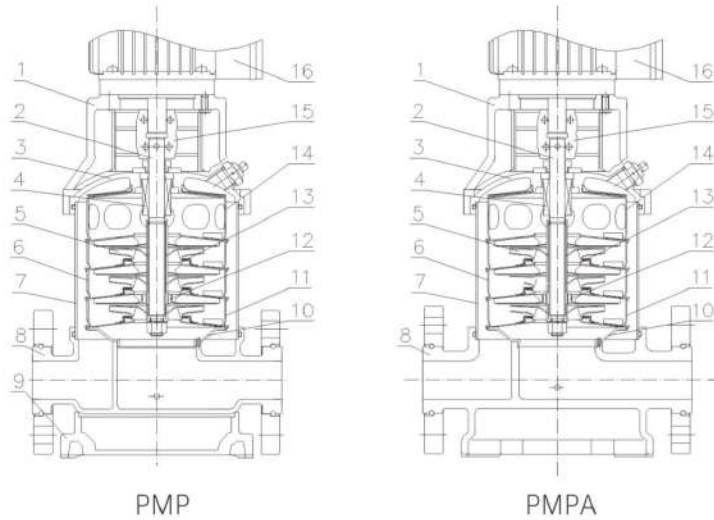
Pumps

- Vertical and compact structure, the inlet and outlet flanges are located at the same central line, small area occupation and easy installation.
- Assembly mechanical seal, making installation and maintenance safer and more convenient, and guaranteeing the reliability of the mechanical seal.
- Wet parts are made of stainless steel, which will not contaminate medium and possess lengthy service life and elegant appearance.
- Electric motor shaft directly and accurately connects with pump shaft through coupling.
- Low noise and less vibration.
- Standardized design and outstanding universality.

Motor

- protection class: IP55
- insulation class: F
- Standard voltage: 1 × 220-230/240V 50Hz
3 × 200V-220/346-380V 50Hz
3 × 220V-240/380-415V 50Hz
3 × 380-415V 50Hz
- working mode: S1

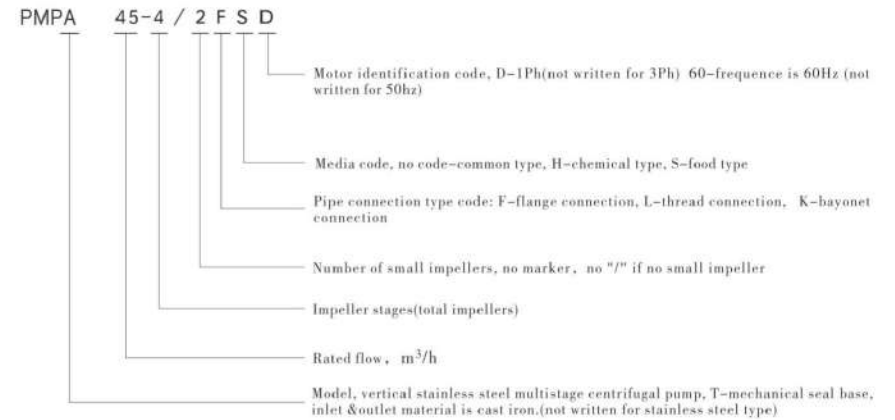
■ Structure



■ Material

No.	Name	Material science	
1	Electric motor base	HT200	
2	Pump shaft	0Cr18Ni9	
3	Mechanical seal base	PMP	
		PMPA64 and below	ZG0Cr18Ni9
		PMPA90 and below	HT250
4	Mechanical seal	Subassembly	
		PMP, PMPA90 and below	0Cr18Ni9
5	Impeller	PMP, PMPA120 and below	ZG0Cr18Ni9
		PMP, PMPA90 and below	0Cr18Ni9
6	Diffuser	PMP, PMPA90 and below	0Cr18Ni9
		PMP, PMPA120 and below	ZG0Cr18Ni9
7	Cylinder	0Cr18Ni9	
8	Inlet & outlet	PMP	
		PMPA8 and below	HT250
		PMPA12 and below	QT500-7
9	Base plate	PMP	
10	Inducer	0Cr18Ni9	
11	Diffuser with bearing	0Cr18Ni9	
12	Sliding bearing	YG6	
13	Seal ring	F-4	
14	Top diffuser	0Cr18Ni9	
15	Coupling	ZG25	
16	Motor	Subassembly	

■ Model explanation



■ Transportation medium

- transportation medium temperature: -20℃ ~ +120℃ —— common type
-20℃ ~ +180℃ —— hot water type
- Transport light, clean, non-inflammable or explosive medium without any solid particles or fibers
- PMP-can transport mildly corrosive medium PMPA- transport non-corrosive medium

■ Scope of application

- Water supply: water transportation in water plants, boosting system in high building etc.
- Industrial liquid transportation: air-condition system, boiler water supply and machine associate purpose, etc.
- Water treatment: reverse osmosis system, water treatment system Of swimming pools.
- Irrigation: farmland irrigation, spray irrigation and dripping irrigation

■ Operation conditions and product range

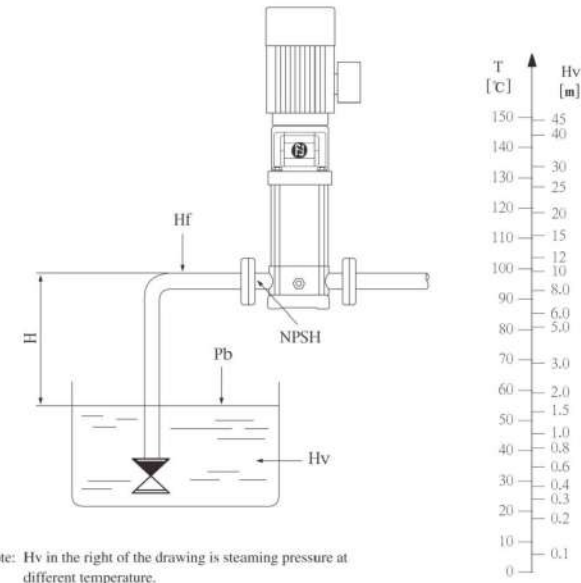
Model	PMP2 PMPA2	PMP4 PMPA4	PMP8 PMPA8	PMP12 PMPA12	PMP16 PMPA16	PMP20 PMPA20	PMP32 PMPA32	PMP45 PMPA45	PMP64 PMPA64	PMP90 PMPA90	PMP120 PMPA120	PMP150 PMPA150
(Rated flow) Q_0 m^3/h	1, 2	3, 4, 5	8, 10	12	16	20	32	45	64	90	120	150, 200
Suggested flow range application m^3/h	1~3.5	2~8	6~12	7~16	8~22	10~28	15~40	22~58	30~85	45~120	60~160	75~180
Maximum head(under rated RPM) m	231	209	212	235	215	255	266	336	239	205	225	206
Max. efficiency %	48.5	63.5	65.5	63.2	67.1	70.2	75.1	77.9	79.2	81.6	79.5	76.6
Q_{min} , m^3/h Min. flow set for prevention from overheat	-20~ +120℃	$Q_{min}=0.1 Q_0$, Q_0 Is the rated flow										
	>-20~ +180℃	$Q_{min}=[0.1+0.005(t-70)] Q_0$, t Is the temperature of the medium , Q_0 Is the rated flow										
P, kW Motor power	0.37~3	0.37~4	0.75~7.5	1.5~11	2.2~15	1.1~18.5	1.5~30	3~45	4~45	5.5~45	11~75	11~75
DN Flange diameter	25	32	40	50	50	50	65	80	100	100	125	125
Temperature ℃	Medium	Common type: -20~+120; Hot water type: -20~+180										
	Ambient	$\leq +40$. If out of the range, motor power should be increased.										
m Altitude	≤ 1000 . If out of the range, motor power should be increased.											
P_{max} , bar Max. working pressure	See the max. working pressure table											
P_{1max} , bar Max. inlet pressure	See the Max. inlet pressure table to get P_{1max} value, then calculate: $P_{1max}=P_{2max}-0.125 \times H_0$ (P_{2max} is Max. working pressure H_0 -pump head in the nameplate the smaller one is the correct one.											
m Installation height See the sketch	$H=P_b \times 10.2 - NPSH - H_f - H_v - H_s$ P_b — Atmospheric pressure (open system) or (close system) , bar NPSH— Net positive suction head , m H_f — Pressure loss at inlet , m H_v — Medium steaming pressure , m H_s — Safety margin (Min.5m delivery head) , m											

■ P_{2max} Max. working pressure P_{1max} Max. inlet pressure , bar

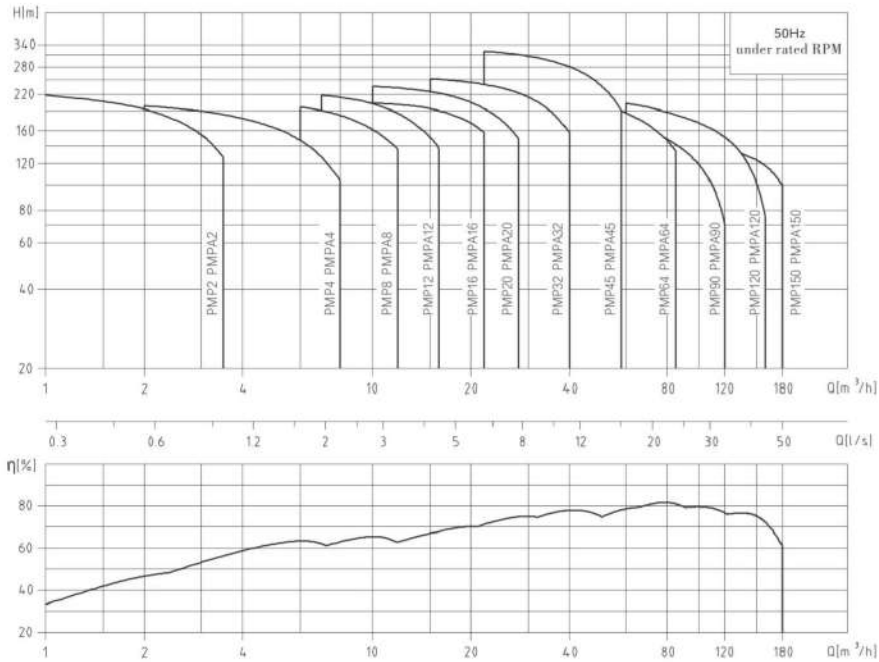
Pump model	Stages	P_{2max}	P_{1max}
PMP1, 2 PMPA1, 2	2	25	6
	3~11		10
	12~26		15
PMP3, 4, 5 PMPA3, 4, 5	2	25	6
	3~10		10
	11~22		15
PMP8, 10 PMPA8, 10	2~6	25	6
	7~20		10
	2~4		6
PMP12 PMPA12	5~18	25	10
	2~3		6
PMP16 PMPA16	4~10	16	6
	11~16		10
PMP20 PMPA20	1~3	16	6
	4~10		10
	11~17		10
PMP32 PMPA32	1/1~2/2	16	3
	2~4		4
	5/2~7		10
	8/2~10	25	10
	11/2~12		15
	13/2~14		30

Pump model	Stages	P_{2max}	P_{1max}	
PMP45 PMPA45	1/1	16	3	
	1~2		4	
	3/2~5		10	
	6/2~9		15	
PMP64 PMPA64	10/2~13/2	25	33	
	1/1~2/2		16	4
	2/1~4/2			10
	4/1~5			15
PMP90 PMPA90	6/2~8/1	25	15	
	1/1~1		16	4
	2/2~3/2			10
	3~4			15
PMP120 PMPA120	5/2~6	25	15	
	1~2/1		25	4
	2~5/1			10
PMP150, 200 PMPA150, 200	6/1~7	25	15	
	1/1~1		25	4
	2/1~4/2			10
	5/2~6		15	

(note the Max. inlet pressure P_{1max} should meet the requirement: $P_{1max} \leq P_{2max} - 0.125 \times H_0$ (P_{2max} - Max. working pressure, H_0 -pump head in the nameplate), the smaller one between the calculated value and the one in the table is correct.



■ Performance range



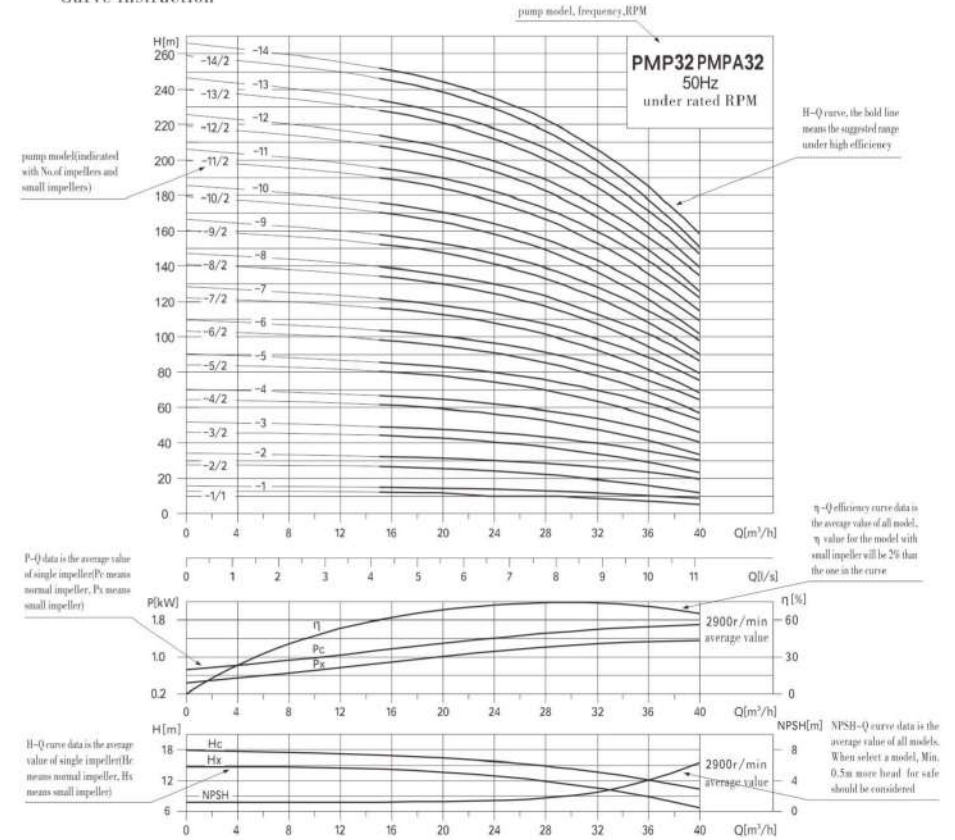
■ Performance curve instruction

The instruction is for the curve as below:

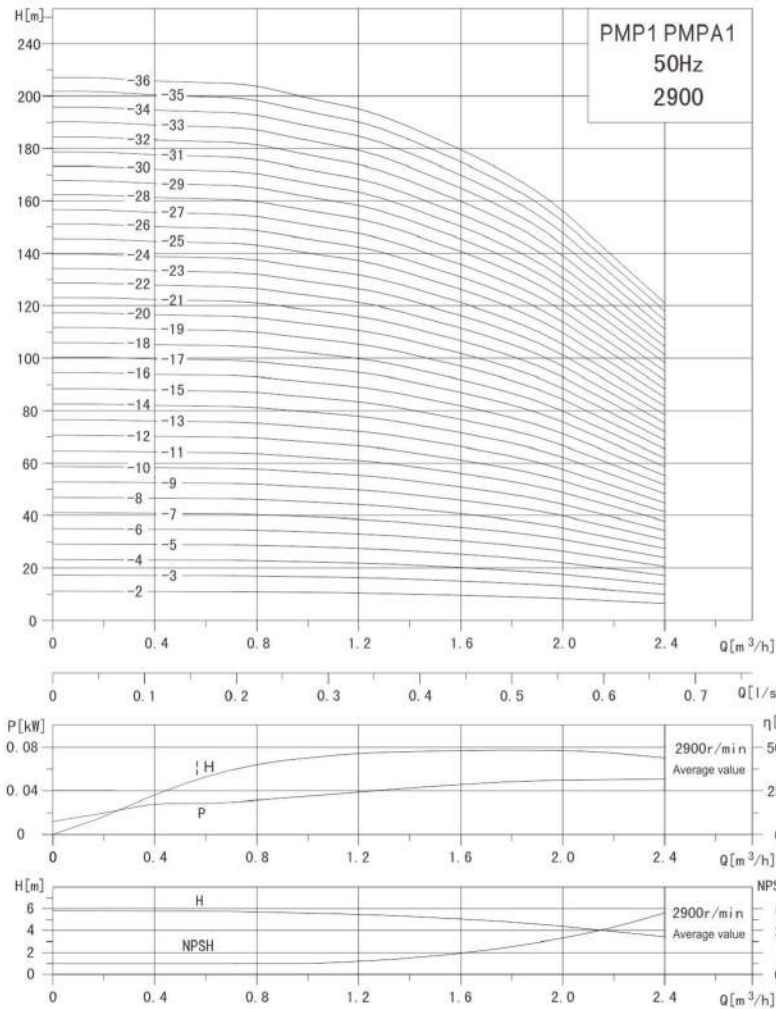
- All curves based on $3 \times 380-415V, 50Hz$; and all data are test value under 2900r/min, except that the corresponding H-Q curve data is the test value under the RPM listed in the motor nameplate. η -Q efficiency curve data is the average value of all model, η value for the model with small impeller will be 2% than the one in the curve; P-Q shaft power curve data is the average value of single impeller (for model with small impeller, Pc means normal impeller, Px means small impeller); H-Q single stage head curve data is the average value of single impeller (for model with small impeller, Hx means small impeller); NPSH-Q curve data is the average value of all models. When select a model, Min. 0.5m more head for safe should be considered.

- Curve tolerance meet the requirement of GB/T3216-2005, see appendix C.
- Test medium is water at normal temperature, without air.
- When select a pump, please refer to suggested the bold part of the curve, in case any dangers due to too small or big flow.

Curve instruction



■ Performance curve

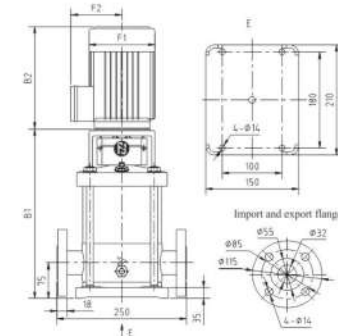


■ Performance data

Pump model	motor		Flow m³/h	0.7	0.8	1.2	1.6	1.8	2	2.4
	Power KW	Theoretical speed r/min								
PMP1 PMPA1	-2	0.37	2900	11	11	10.5	10	9	8	7
	-3	0.37	2900	17	17	16	15	14	13	10
	-4	0.37	2900	23	23	22	20	19	17	14
	-5	0.37	2900	29	29	28	25	24	22	21
	-6	0.37	2900	35	35	33	30	29	26	27
	-7	0.37	2900	40	40	39	36	34	31	24
	-8	0.55	2900	46	46	44	41	39	35	27
	-9	0.55	2900	52	52	50	46	43	40	31
	-10	0.55	2900	58	58	55	51	48	44	34
	-11	0.55	2900	64	64	61	56	53	49	38
	-12	0.75	2900	70	69	67	61	58	53	41
	-13	0.75	2900	75	75	72	66	63	58	45
	-14	0.75	2900	81	81	78	72	68	62	48
	-15	0.75	2900	87	87	83	77	72	67	52
	-16	1.1	2900	93	93	89	82	77	71	55
	-17	1.1	2900	99	99	95	87	82	76	59
	-18	1.1	2900	104	104	100	92	87	80	62
	-19	1.1	2900	110	110	105	97	92	84	65
	-20	1.1	2900	116	116	111	102	96	89	69
	-21	1.1	2900	121	121	116	107	101	93	72
	-22	1.1	2900	127	127	121	112	105	97	75
	-23	1.1	2900	132	132	127	116	110	101	79
	-24	1.5	2900	138	137	132	121	114	105	82
	-25	1.5	2900	144	143	137	126	119	110	85
	-26	1.5	2900	149	149	142	131	124	114	88
	-27	1.5	2900	154	154	148	136	128	118	92
	-28	1.5	2900	160	160	153	141	133	122	95
	-29	1.5	2900	166	165	158	145	137	127	98
	-30	1.5	2900	171	170	163	150	142	131	101
	-31	2.2	2900	176	176	168	155	146	135	105
	-32	2.2	2900	182	181	174	160	151	139	108
	-33	2.2	2900	188	187	179	165	156	143	111
	-34	2.2	2900	193	193	185	170	160	148	115
	-35	2.2	2900	199	198	190	175	165	152	118
	-36	2.2	2900	204	204	195	179	170	156	121

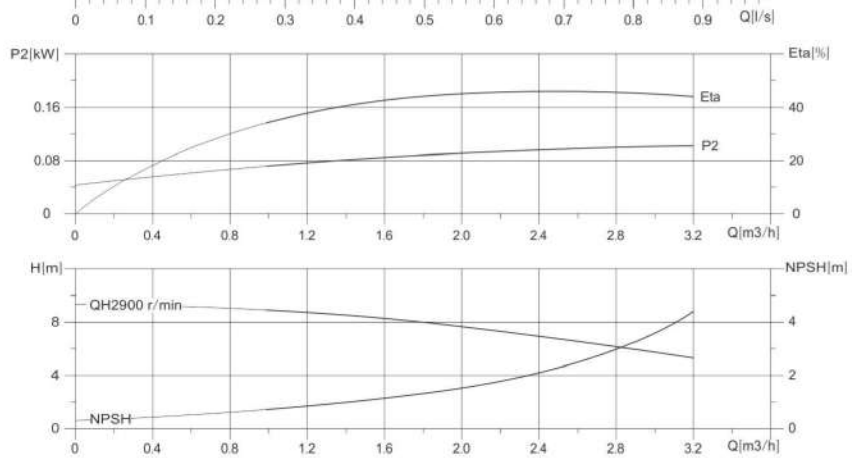
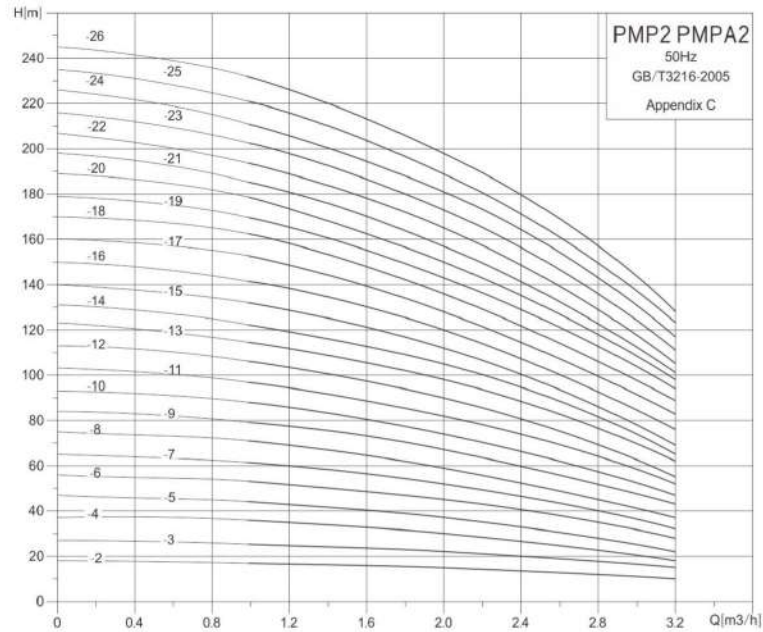
■ Dimension and weight

■ Installation sketch



Pump model	Dimension mm					weight kg	
	B1	B2	B+B2	F1	F2	PMP	PMPA
-2	250	215	465	140	119	22	22.5
-3	268	215	483	140	119	22	22.5
-4	286	215	501	140	119	23	23.5
-5	304	215	519	140	119	23	23.5
-6	322	215	537	140	119	24	24.5
-7	340	215	555	140	119	26	26.5
-8	358	215	573	140	119	27	27.5
-9	376	215	591	140	119	27	27.5
-10	394	215	609	140	119	28	28.5
-11	412	215	627	140	119	28	28.5
-12	430	244	683	151	125	29	29.5
-13	457	244	701	151	125	29	29.5
-14	475	244	719	151	125	29	29.5
-15	493	244	737	151	125	30	30.5
-16	511	244	755	151	125	31	31.5
-17	529	244	773	151	125	32	32.5
-18	547	244	791	151	125	32	32.5
-19	565	244	809	151	125	33	33.5
-20	583	244	827	151	125	33	33.5
-21	601	244	845	151	125	33	33.5
-22	619	244	863	151	125	34	34.5
-23	637	244	881	151	125	34	34.5
-24	666	287	953	171	138	40	40.5
-25	684	287	971	171	138	40	40.5
-26	702	287	989	171	138	41	41.5
-27	720	287	1007	171	138	41	41.5
-28	738	287	1025	171	138	42	42.5
-29	756	287	1043	171	138	42	42.5
-30	774	287	1061	171	138	42	42.5
-31	792	287	1079	171	138	45	45.5
-32	810	287	1097	171	138	46	46.5
-33	828	287	1115	171	138	46	46.5
-34	846	287	1133	171	138	47	47.5
-35	864	287	1151	171	138	47	47.5
-36	882	287	1169	171	138	47	47.5

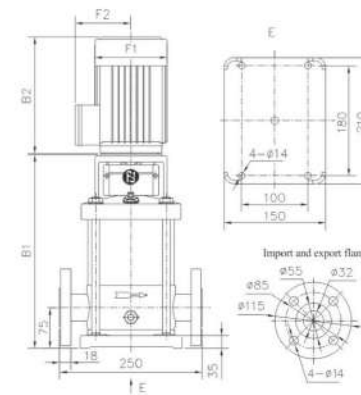
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	1.0	1.2	1.6	2.0	2.4	2.8	3.2
	Power kW	Theoretical speed r/min								
PMP2 PMPA2	-2	0.37	2900	17	17	16	15	13	12	10
	-3	0.37	2900	25	25	24	22	20	18	15
	-4	0.55	2900	36	35	33	30	27	23	18
	-5	0.55	2900	44	43	40	37	33	28	22
	-6	0.75	2900	53	52	49	45	41	35	28
	-7	0.75	2900	62	60	57	52	47	40	32
	-8	1.1	2900	71	70	65	59	53	45	37
	-9	1.1	2900	79	78	73	67	60	53	43
	-10	1.1	2900	88	87	81	74	67	58	47
	-11	1.1	2900	95	95	89	82	74	65	52
	-12	1.5	2900	107	104	98	90	81	70	55
	-13	1.5	2900	115	113	106	98	89	77	58
	-14	1.5	2900	123	119	113	105	95	83	64
	-15	1.5	2900	133	130	122	112	101	87	69
	-16	2.2	2900	142	139	131	120	108	93	76
	-17	2.2	2900	153	148	139	128	115	100	83
	-18	2.2	2900	163	159	147	136	123	107	90
	-19	2.2	2900	170	167	156	143	130	114	94
	-20	2.2	2900	176	174	163	150	136	119	98
	-21	2.2	2900	185	182	171	157	142	124	101
	-22	2.2	2900	192	190	179	165	150	130	105
	-23	3	2900	201	198	187	173	157	137	111
	-24	3	2900	210	206	195	181	165	144	117
	-25	3	2900	221	216	205	189	172	151	123
	-26	3	2900	232	227	214	198	180	158	128

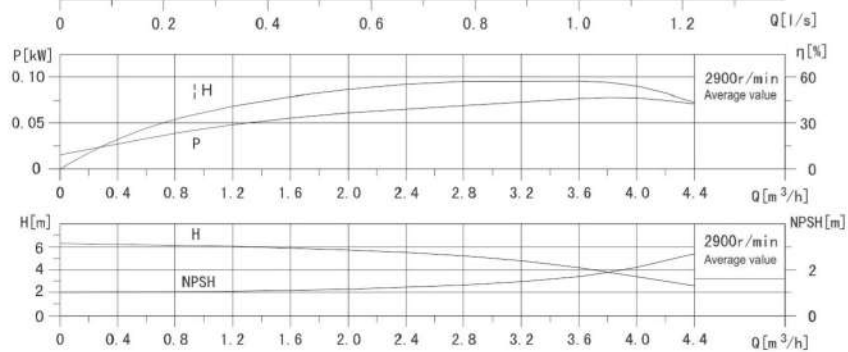
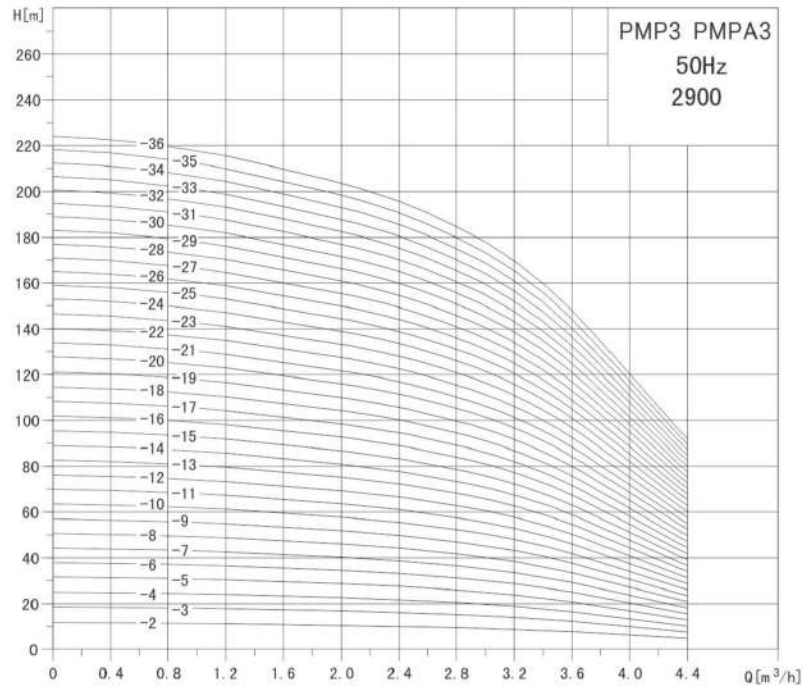
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm					weight kg	
	B1	B2	B1-B2	F1	F2	PMP	PMPA
PMP2 PMPA2	-2	257	215	472	140	119	22
	-3	275	215	490	140	119	23
	-4	293	215	508	140	119	26
	-5	311	215	526	140	119	26
	-6	338	244	582	151	125	27
	-7	356	244	600	151	125	27
	-8	374	244	618	151	125	29
	-9	392	244	636	151	125	29
	-10	410	244	654	151	125	30
	-11	428	244	672	151	125	30
	-12	457	287	744	171	138	35
	-13	475	287	762	171	138	36
	-14	493	287	780	171	138	36
	-15	511	287	798	171	138	37
	-16	529	287	816	171	138	40
	-17	547	287	834	171	138	40
	-18	565	287	852	171	138	41
	-19	583	287	870	171	138	41
	-20	601	287	888	171	138	42
	-21	619	287	906	171	138	42
	-22	637	287	924	171	138	43
	-23	665	337	1002	196	150	50
	-24	683	337	1020	196	150	51
	-25	701	337	1038	196	150	51
	-26	719	337	1056	196	150	52

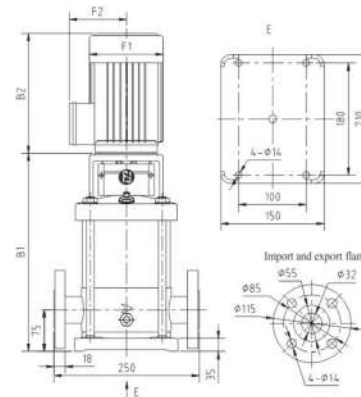
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	1.2	1.6	2	2.4	3	3.2	3.6	4	4.4
	Power kW	Theoretical speed r/min										
PMP3 PMPA3	-2	0.37	2900	11	11	9	10	9.5	9	8	6	5
	-3	0.37	2900	18	17	15	16	15	14	12	10	8
	-4	0.37	2900	24	23	20	22	21	19	16	13	10
	-5	0.37	2900	30	29.5	25	28	26	24	21	17	13
	-6	0.55	2900	36	35	30	33	31	29	25	20	16
	-7	0.55	2900	43	41	35	39	36	34	29	24	18
	-8	0.75	2900	49	47	40	44	42	38	33	27	21
	-9	0.75	2900	55	53	45	50	47	43	38	31	23
	-10	0.75	2900	61	59	50	55	52	48	42	34	26
	-11	1.1	2900	67	65	55	61	58	53	46	38	29
	-12	1.1	2900	73	71	60	67	63	58	50	41	31
	-13	1.1	2900	80	77	66	72	68	63	55	44	34
	-14	1.1	2900	86	83	71	78	73	67	59	50	37
	-15	1.1	2900	92	89	76	83	79	72	63	51	39
	-16	1.5	2900	98	95	81	89	84	77	67	55	42
	-17	1.5	2900	104	101	86	95	89	82	72	58	44
	-18	1.5	2900	110	107	91	100	95	87	76	62	47
	-19	1.5	2900	116	113	96	106	100	92	80	65	50
	-20	2.2	2900	123	120	101	112	105	97	84	69	52
	-21	2.2	2900	129	125	106	117	110	101	88	72	55
	-22	2.2	2900	135	131	111	122	116	106	93	75	57
	-23	2.2	2900	141	137	116	128	121	111	97	79	60
	-24	2.2	2900	147	143	121	134	126	116	101	82	63
	-25	2.2	2900	153	149	126	139	131	120	105	85	65
	-26	2.2	2900	159	154	131	144	136	125	109	89	68
	-27	2.2	2900	165	160	136	149	141	130	113	92	70
	-28	2.2	2900	170	166	141	155	146	134	117	95	73
	-29	2.2	2900	176	171	145	160	151	139	121	98	75
	-30	3	2900	182	177	150	165	156	143	125	101	77
	-31	3	2900	187	182	155	170	161	148	129	105	80
	-32	3	2900	193	188	159	175	165	152	133	108	82
	-33	3	2900	199	193	164	180	170	156	136	111	85
	-34	3	2900	204	199	169	186	175	161	140	114	87
	-35	3	2900	210	204	173	191	180	165	144	117	89
	-36	3	2900	216	210	178	196	185	170	148	120	92

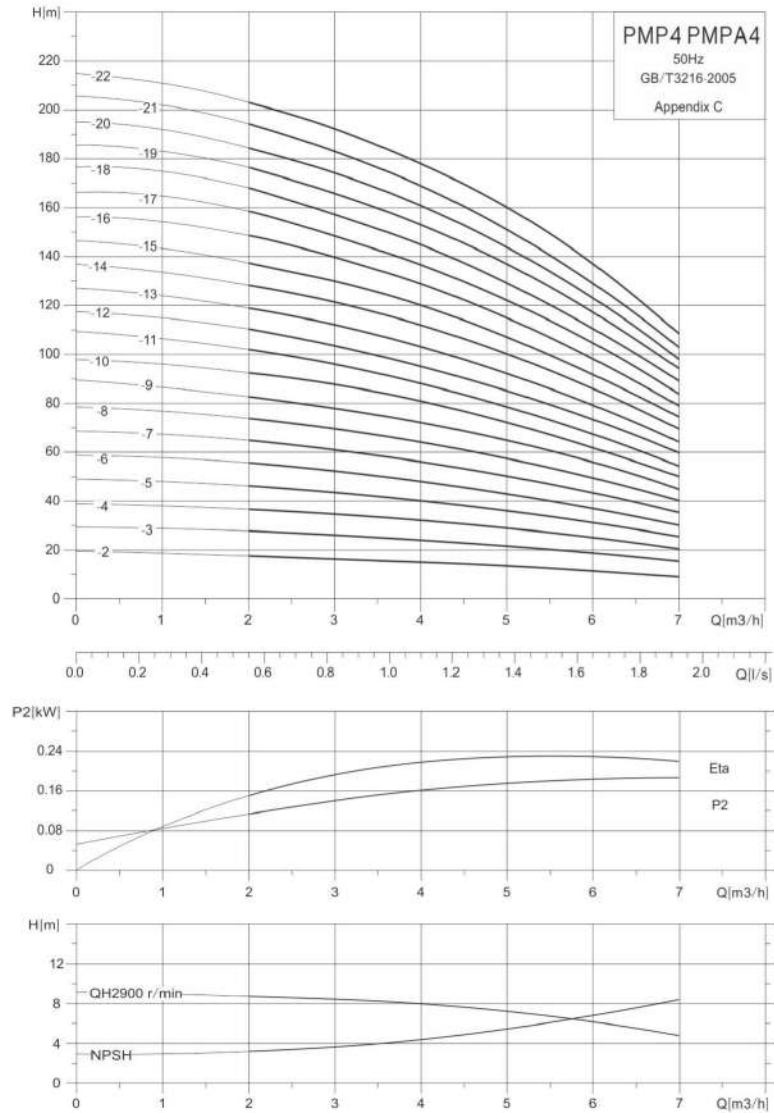
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm				weight kg			
	B1	B2	B+B2	F1	F2	DBL	DBLT	
PMP3 PMPA3	-2	250	215	465	140	119	22	22.5
	-3	268	215	483	140	119	22	22.5
	-4	286	215	501	140	119	23	23.5
	-5	304	215	519	140	119	23	23.5
	-6	322	215	537	140	119	26	26.5
	-7	340	215	555	140	119	26	26.5
	-8	358	244	602	151	125	27	27.5
	-9	376	244	650	151	125	27	27.5
	-10	394	244	698	151	125	28	28.5
	-11	412	244	696	151	125	29	29.5
	-12	439	244	683	151	125	30	30.5
	-13	457	244	701	151	125	30	30.5
	-14	475	244	719	151	125	31	31.5
	-15	493	244	737	151	125	31	31.5
	-16	511	267	798	171	138	37	37.5
	-17	529	267	816	171	138	37	37.5
	-18	547	267	834	171	138	37	37.5
	-19	565	267	852	171	138	41	41.5
	-20	583	267	870	171	138	41	41.5
	-21	601	267	888	171	138	41	41.5
	-22	619	267	906	171	138	42	42.5
	-23	637	267	924	171	138	42	42.5
	-24	655	267	953	171	138	43	43.5
	-25	664	267	971	171	138	43	43.5
	-26	702	267	989	171	138	43	43.5
	-27	720	267	1007	171	138	44	44.5
	-28	738	267	1025	171	138	44	44.5
	-29	756	267	1043	171	138	45	45.5
	-30	774	397	1171	196	150	52	52.5
	-31	792	397	1189	196	150	53	53.5
	-32	810	397	1207	196	150	53	53.5
	-33	828	397	1225	196	150	54	54.5
	-34	846	397	1243	196	150	54	54.5
	-35	864	397	1261	196	150	55	55.5
	-36	882	397	1279	196	150	55	55.5

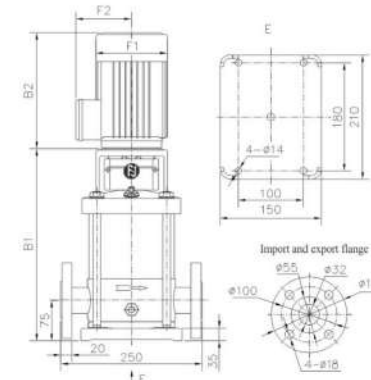
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	2	3	4	5	6	7
	Power KW	Theoretical speed r/min							
PMP4 PMPA4	-2	0.37	2800	18	16	15	13	11	9
	-3	0.55	2800	28	26	24	21	19	15
	-4	0.75	2830	37	35	32	29	25	20
	-5	1.1	2830	46	43	40	36	31	26
	-6	1.1	2830	56	52	48	43	37	30
	-7	1.5	2840	65	61	56	50	43	35
	-8	1.5	2840	74	69	64	57	49	39
	-9	2.2	2840	83	78	72	65	56	45
	-10	2.2	2840	92	88	81	72	61	50
	-11	2.2	2840	102	96	88	79	67	55
	-12	2.2	2840	110	103	95	85	73	60
	-13	3	2870	119	112	103	92	79	64
	-14	3	2870	128	121	112	100	86	69
	-15	3	2870	137	130	120	107	91	74
	-16	3	2870	148	140	129	115	98	78
	-17	4	2900	158	148	137	122	105	83
	-18	4	2900	168	157	145	129	110	89
	-19	4	2900	176	166	153	137	117	94
	-20	4	2900	184	174	161	143	123	98
	-21	4	2900	194	183	169	151	129	103
	-22	4	2900	203	192	178	160	137	107

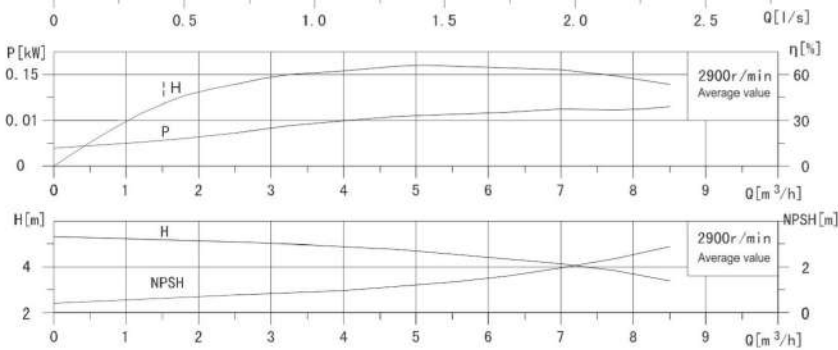
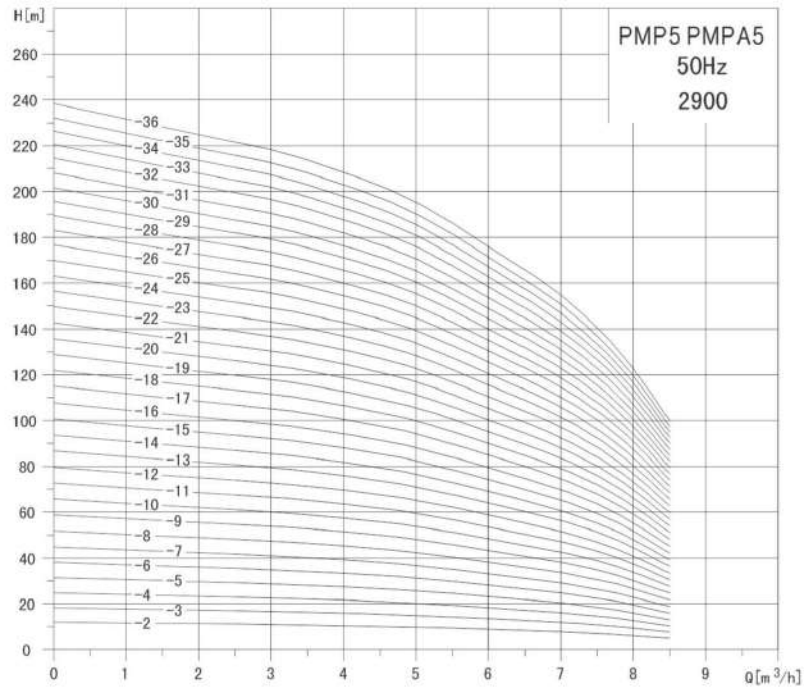
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm					weight kg	
	B1	B2	B1-B2	F1	F2	PMP	PMPA
-2	275	215	490	140	119	23	23.5
-3	302	215	517	140	119	26	26.5
-4	338	244	582	151	125	27	27.5
-5	365	244	609	151	125	29	29.5
-6	392	244	636	151	125	29	29.5
-7	430	287	717	171	138	35	35.5
-8	457	287	744	171	138	36	36.5
-9	484	287	771	171	138	39	39.5
-10	511	287	798	171	138	40	40.5
-11	538	287	825	171	138	40	40.5
-12	565	287	852	171	138	41	41.5
-13	602	337	939	196	150	48	48.5
-14	629	337	966	196	150	49	49.5
-15	656	337	993	196	150	50	50.5
-16	683	337	1020	196	150	51	51.5
-17	710	355	1065	214	169	57	57.5
-18	737	355	1092	214	169	57	57.5
-19	764	355	1119	214	169	58	58.5
-20	791	355	1146	214	169	58	58.5
-21	818	355	1173	214	169	59	59.5
-22	845	355	1200	214	169	60	60.5

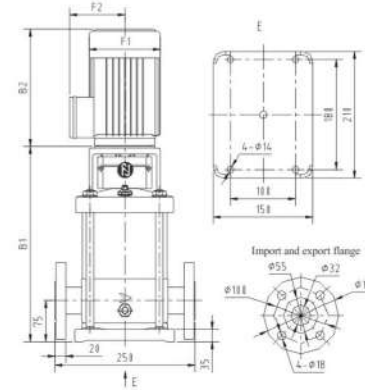
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	2.5	3	4	5	6	7	8	8.5
	Power KW	Theoretical speed /min									
PMP5 PMPA5	-2	0.37	2900	11	11	10.5	10	9	8	6	5
	-3	0.55	2900	17	16.5	16	15	14	12	9	8
	-4	0.55	2900	23	22.5	22	20	18	16	13	10
	-5	0.75	2900	29	28.5	27	26	23	20	16	13
	-6	0.75	2900	36	35	33	31	28	25	20	16
	-7	1.1	2900	42	41	39	37	33	29	23	19
	-8	1.1	2900	48	47	45	42	38	34	27	22
	-9	1.5	2900	55	54	51	48	43	38	30	25
	-10	1.5	2900	61	60	57	54	49	43	34	28
	-11	2.2	2900	68	67	64	60	54	47	37	30
	-12	2.2	2900	74	73	70	65	59	52	41	33
	-13	2.2	2900	81	79	76	71	64	56	45	36
	-14	2.2	2900	87	86	82	77	69	61	61	39
	-15	2.2	2900	94	92	88	83	74	65	52	42
	-16	2.2	2900	100	99	94	88	79	70	55	45
	-17	3	2900	107	105	101	94	85	75	59	48
	-18	3	2900	113	112	107	100	90	79	63	51
	-19	3	2900	120	118	113	106	95	84	66	54
	-20	3	2900	126	124	119	111	100	88	70	57
	-21	4	2900	133	131	125	117	105	93	73	60
	-22	4	2900	139	137	131	123	110	97	77	63
	-23	4	2900	145	143	137	128	115	102	81	66
	-24	4	2900	152	149	143	134	120	106	84	68
	-25	4	2900	158	156	149	139	125	110	87	71
	-26	4	2900	164	162	155	145	130	115	91	74
	-27	4	2900	170	168	160	150	135	119	94	77
	-28	4	2900	176	174	166	155	140	123	98	79
	-29	4	2900	182	179	171	161	144	127	101	82
	-30	5.5	2900	187	185	176	165	149	131	104	85
	-31	5.5	2900	193	191	182	171	154	135	107	87
	-32	5.5	2900	199	197	188	176	158	139	110	90
	-33	5.5	2900	205	202	193	181	163	143	113	92
	-34	5.5	2900	210	207	198	186	167	147	117	95
	-35	5.5	2900	216	213	203	190	171	151	119	97
	-36	5.5	2900	222	218	209	195	176	155	123	100

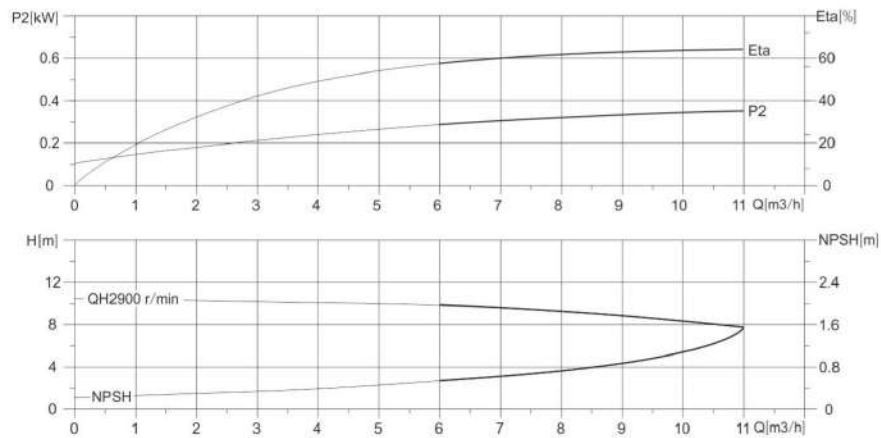
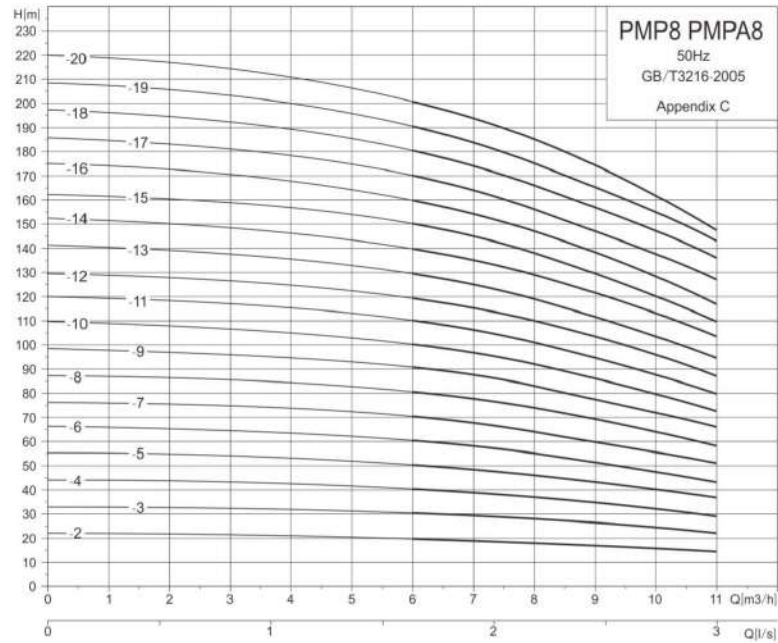
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm				weight kg	
	B1	B2	B-B2	F1	F2	PMP PMPA
-2	266	215	493	140	119	23
-3	285	215	510	140	119	26
-4	322	215	537	140	119	27
-5	358	244	602	151	125	28
-6	385	244	629	151	125	30
-7	412	244	656	151	125	30
-8	439	244	683	151	125	31
-9	477	287	764	171	138	36
-10	494	287	791	171	138	37
-11	531	287	818	171	138	40
-12	558	287	845	171	138	41
-13	585	287	872	171	138	41
-14	612	287	899	171	138	42
-15	639	287	926	171	138	43
-16	666	287	953	171	138	43
-17	703	337	1040	196	150	51
-18	730	337	1067	196	150	52
-19	757	337	1094	196	150	52
-20	784	337	1121	196	150	53
-21	811	355	1199	214	169	59
-22	838	355	1193	214	169	60
-23	865	355	1220	214	169	61
-24	892	355	1247	214	169	61
-25	919	355	1274	214	169	62
-26	946	355	1301	214	169	63
-27	973	355	1328	214	169	63
-28	1000	355	1355	214	169	64
-29	1027	355	1382	214	169	64
-30	1073	383	1456	257	207	83
-31	1100	383	1450	257	190	84
-32	1127	383	1510	257	190	86
-33	1154	383	1537	257	190	88
-34	1181	383	1564	257	190	89
-35	1208	383	1591	257	190	91
-36	1235	383	1618	257	190	93

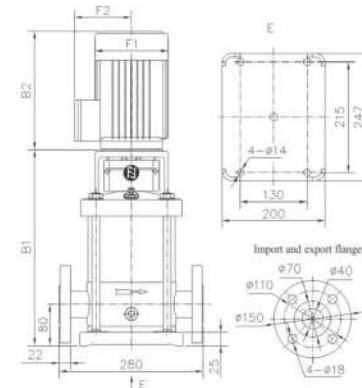
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	6	7	8	9	10	11	
	Power KW	Theoretical speed r/min								
PMP8 PMPA8	-2	0.75	2900	Lift m	20	19	18	16	15	15
	-3	1.1	2900		30	29	28	26	24	22
	-4	1.5	2900		41	39	37	35	33	29
	-5	2.2	2900		50	49	46	43	40	37
	-6	2.2	2900		60	59	55	51	47	43
	-7	3	2900		70	68	64	60	55	51
	-8	3	2900		81	78	74	69	63	58
	-9	4	2900		91	88	83	77	72	66
	-10	4	2900		100	97	92	86	80	72
	-11	4	2900		111	107	101	94	88	80
	-12	4	2900		119	116	110	103	96	87
	-13	5.5	2900		130	125	119	111	103	94
	-14	5.5	2900		140	135	129	121	113	103
	-15	5.5	2900		150	145	138	129	120	110
	-16	5.5	2900		160	155	147	138	129	117
	-17	7.5	2900		170	164	156	147	137	127
	-18	7.5	2900		181	174	166	157	147	136
-19	7.5	2900	191	184	175	165	155	143		
-20	7.5	2900	201	194	185	175	162	147		

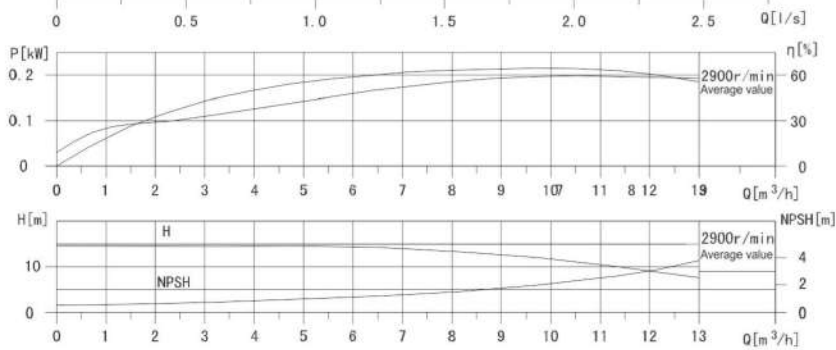
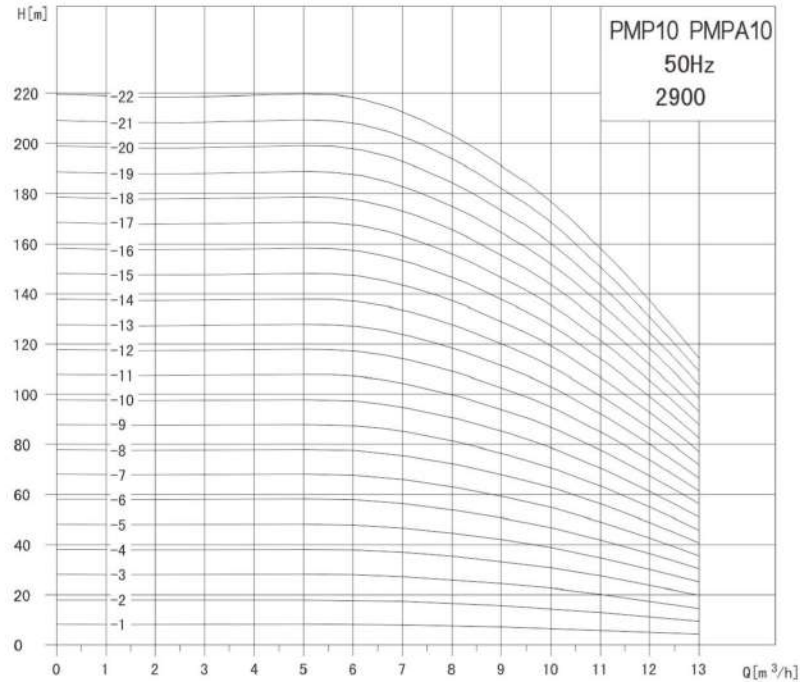
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm					weight kg	
	B1	B2	B1-B2	F1	F2	PMP8	PMPA8
-2	310	244	554	151	125	33	33
-3	340	244	584	151	125	36	36
-4	385	287	672	171	138	42	42
-5	415	287	702	171	138	46	46
-6	445	287	732	171	138	47	47
-7	480	337	817	196	150	55	55
-8	510	337	847	196	150	56	56
-9	540	355	895	214	169	63	63
-10	570	355	925	214	169	64	64
-11	600	355	955	214	169	65	65
-12	630	355	985	214	169	66	66
-13	684	383	1067	257	190	83	83
-14	714	383	1097	257	190	84	84
-15	744	383	1127	257	190	85	85
-16	774	383	1157	257	190	87	87
-17	804	383	1187	257	190	92	92
-18	834	383	1217	257	190	93	93
-19	864	383	1247	257	190	94	94
-20	894	383	1277	257	190	95	95

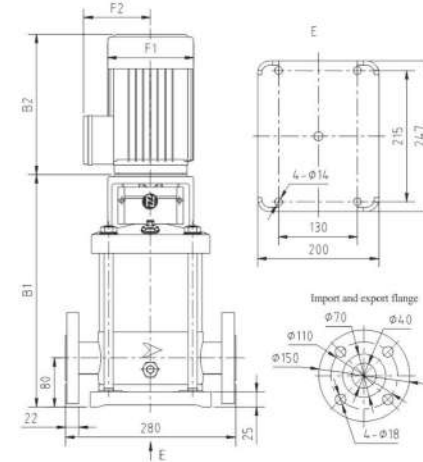
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	5	6	7	8	9	10	11	12	13
	Power KW	Theoretical speed r/min										
PMP10 PMPA10	-1	0.37	2900	8.5	8.5	8	7.5	7	6.5	6	5	4
	-2	0.75	2900	18	18	17.5	17	16	15	13	11	9
	-3	1.1	2900	28	28	27	26	24	23	20	18	15
	-4	1.5	2900	38	38	37	35	33	31	27	24	20
	-5	2.2	2900	48	48	47	45	42	39	35	30	25
	-6	2.2	2900	58	58	56	54	51	47	42	36	30
	-7	3	2900	68	67.5	66	63	59	55	49	43	36
	-8	3	2900	78	77.5	76	72	68	63	56	49	41
	-9	3	2900	88	87	85	81	77	71	63	55	46
	-10	4	2900	98	97	95	91	85	79	71	61	51
	-11	4	2900	108	107	104	100	94	87	78	68	56
	-12	4	2900	118	117	114	109	103	95	85	74	61
	-13	5.5	2900	128	127	124	118	111	103	92	82	67
	-14	5.5	2900	138	137	134	128	120	111	99	86	72
	-15	5.5	2900	148	147	144	137	129	119	107	93	77
	-16	5.5	2900	158	158	153	147	138	128	114	99	83
	-17	7.5	2900	168	168	163	156	147	136	121	106	88
	-18	7.5	2900	179	178	173	165	156	144	129	112	93
	-19	7.5	2900	189	188	183	175	164	152	136	118	98
	-20	7.5	2900	199	198	193	184	173	160	144	125	104
	-21	7.5	2900	209	208	203	194	182	169	151	131	109
	-22	7.5	2900	220	218	213	203	191	177	158	138	114

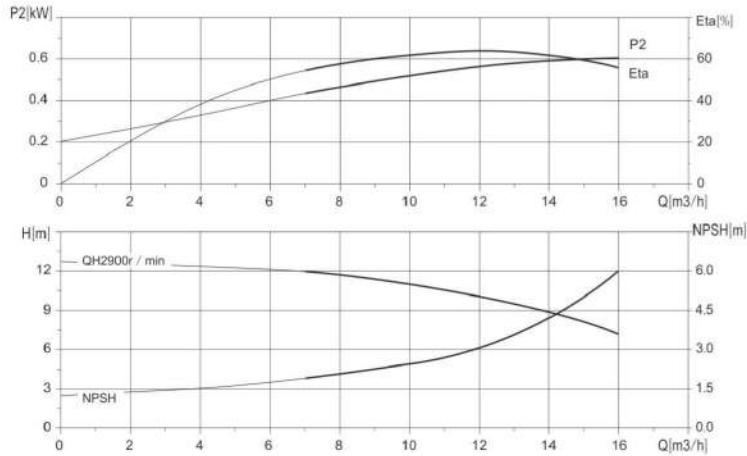
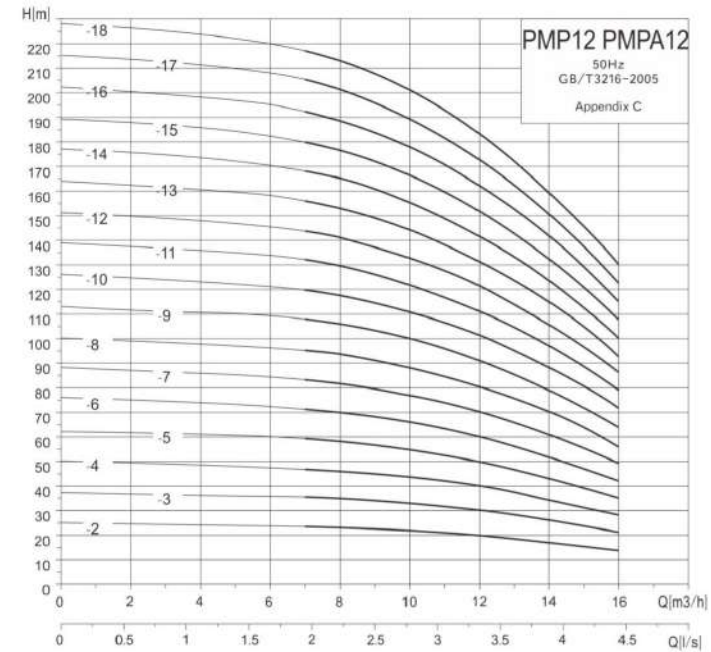
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm					weight kg	
	B1	B2	B+B2	F1	F2	PMP	PMPA
PMP10 PMPA10	-1	306	215	521	140	119	32
	-2	306	244	550	151	125	35
	-3	336	244	580	151	125	38
	-4	381	287	668	171	138	45
	-5	411	287	698	171	138	50
	-6	441	287	728	171	138	52
	-7	476	337	813	196	150	61
	-8	506	337	843	196	150	63
	-9	536	355	891	196	150	65
	-10	566	355	921	214	169	72
	-11	596	355	951	214	169	74
	-12	626	355	981	214	169	76
	-13	680	383	1063	257	190	94
	-14	710	383	1093	257	190	96
	-15	740	383	1123	257	190	98
	-16	770	383	1153	257	190	100
	-17	800	383	1183	257	190	106
	-18	830	383	1213	257	190	108
	-19	860	383	1243	257	190	110
	-20	890	383	1273	257	190	112
	-21	920	383	1303	257	190	114
	-22	950	383	1333	257	190	116

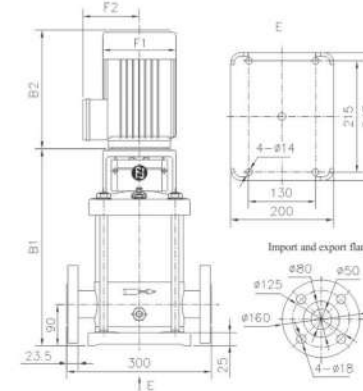
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	7	8	9	10	11	12	13	14	15	16
	Power KW	Theoretical speed r/min		Lift m									
PMP12 PMPA12	-2	1.5	2900	24	23	23	22	21	20	19	17	16	14
	-3	2.2	2900	36	35	34	33	32	30	28	26	24	21
	-4	3	2900	47	46	45	44	42	40	37	34	31	28
	-5	3	2900	60	58	57	55	53	50	47	43	39	35
	-6	4	2900	72	70	68	66	63	60	56	52	47	42
	-7	5.5	2900	84	82	80	77	74	70	66	61	55	49
	-8	5.5	2900	96	94	91	88	84	80	75	70	63	56
	-9	5.5	2900	108	106	103	100	96	91	85	79	72	64
	-10	7.5	2900	120	118	115	111	106	101	95	88	80	72
	-11	7.5	2900	132	130	126	122	117	111	104	97	88	79
	-12	7.5	2900	144	141	137	133	127	121	114	106	96	86
	-13	11	2900	156	153	149	144	138	131	123	115	104	93
	-14	11	2900	168	165	160	155	148	141	133	124	112	100
	-15	11	2900	180	177	172	167	159	151	142	133	120	108
	-16	11	2900	193	189	184	178	170	162	152	142	129	115
	-17	11	2900	205	201	196	190	181	172	162	151	137	123
	-18	11	2900	217	213	208	202	193	183	172	160	145	130

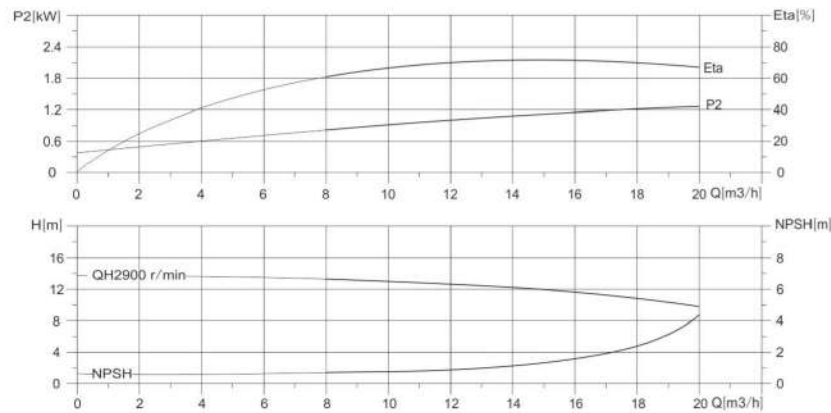
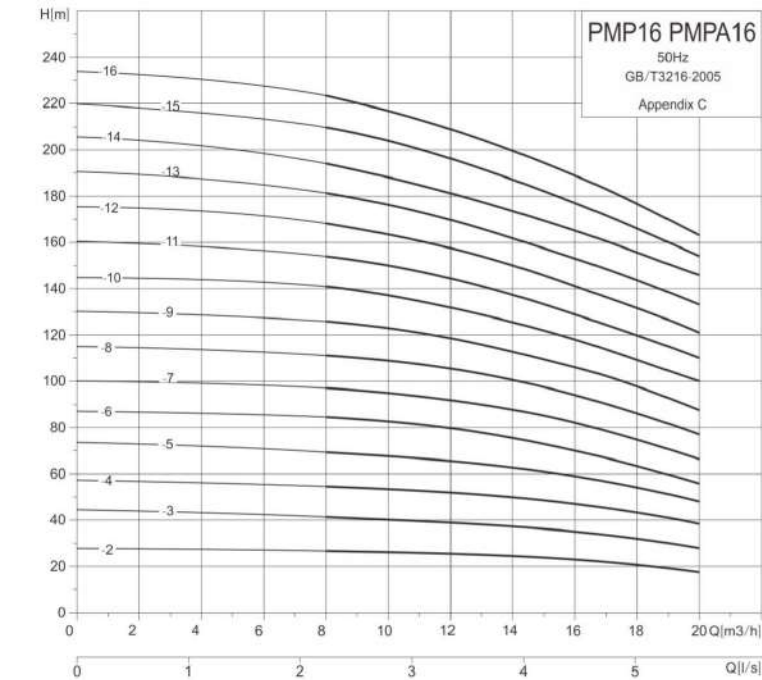
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm					weight kg	
	B1	B2	B1-B2	F1	F2	PMP	PMPA
PMP12 PMPA12	-2	340	287	627	171	138	42
	-3	370	287	657	171	138	45
	-4	405	337	742	196	150	53
	-5	435	337	772	196	150	54
	-6	465	355	821	214	169	61
	-7	519	383	902	257	190	79
	-8	549	383	932	257	190	80
	-9	579	383	962	257	190	81
	-10	609	383	992	257	190	86
	-11	639	383	1022	257	190	86
	-12	669	383	1052	257	190	88
	-13	785	501	1286	330	261	155
	-14	815	501	1316	330	261	156
	-15	845	501	1346	330	261	157
	-16	875	501	1376	330	261	158
	-17	905	501	1406	330	261	159
	-18	935	501	1436	330	261	160

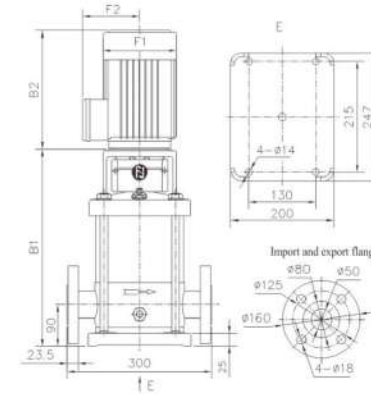
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	8	10	12	14	16	18	20	
	Power KW	Theoretical speed r/min									
PMP16 PMPA16	-2	2.2	2900	Lift m	26	26	25	24	23	20	17
	-3	3	2900		41	40	38	37	35	32	28
	-4	4	2900		54	53	52	50	47	43	38
	-5	5.5	2900		69	68	65	62	59	54	47
	-6	5.5	2900		85	83	80	75	70	64	56
	-7	7.5	2900		97	95	92	87	82	75	66
	-8	7.5	2900		111	109	105	100	94	86	77
	-9	11	2900		126	123	119	113	106	98	87
	-10	11	2900		141	137	132	125	118	110	100
	-11	11	2900		154	150	144	137	129	120	110
	-12	11	2900		168	164	158	150	141	132	121
	-13	15	2900		182	177	170	162	153	144	133
	-14	15	2900		195	188	182	173	165	155	146
	-15	15	2900		210	204	196	187	177	166	154
	-16	15	2900		224	217	209	199	189	177	164

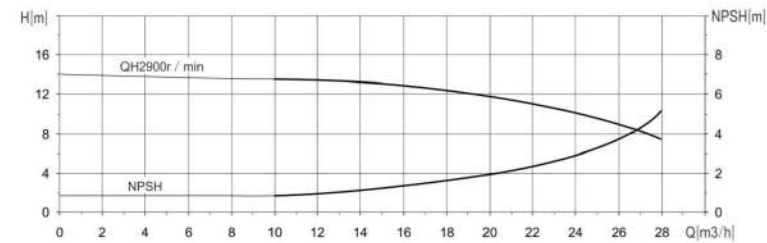
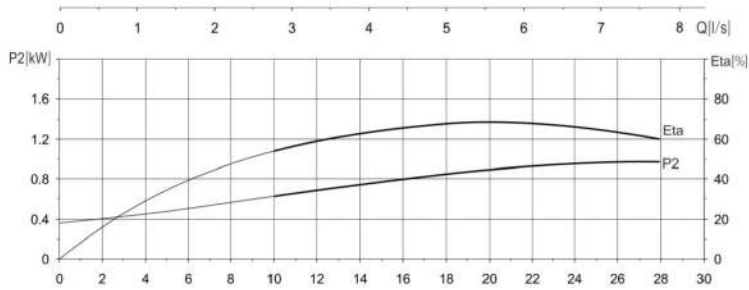
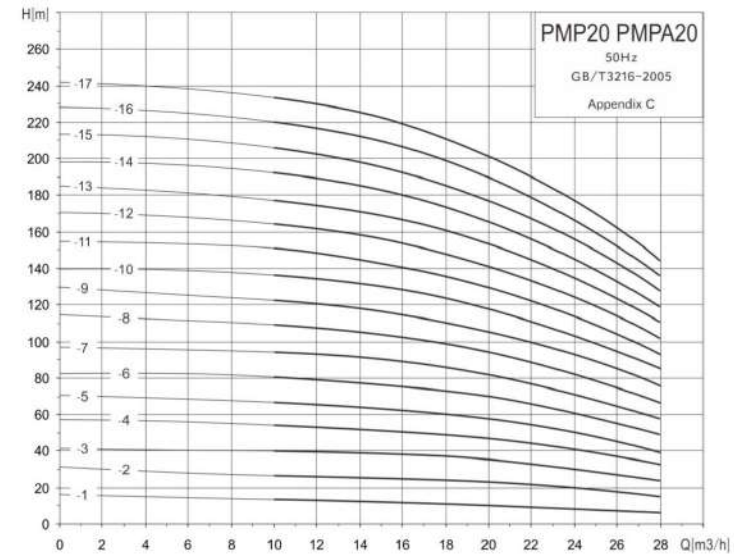
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm					weight kg	
	B1	B2	B1-B2	F1	F2	PMP	PMPA
PMP16 PMPA16	-2	355	287	642	171	138	45
	-3	405	337	742	196	150	54
	-4	450	355	805	214	169	61
	-5	519	383	902	257	190	77
	-6	564	383	947	257	190	79
	-7	609	383	992	257	190	85
	-8	654	383	1037	257	190	86
	-9	785	501	1286	330	261	153
	-10	830	501	1331	330	261	154
	-11	875	501	1376	330	261	156
	-12	920	501	1421	330	261	157
	-13	965	501	1466	330	261	169
	-14	1010	501	1511	330	261	170
	-15	1055	501	1556	330	261	171
	-16	1100	501	1601	330	261	173

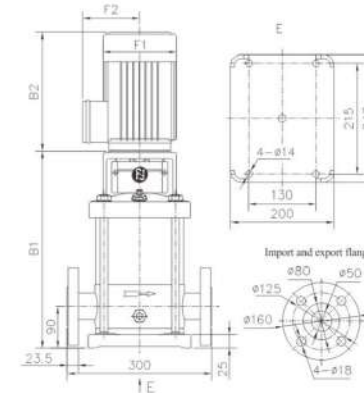
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	10	12	14	16	18	20	22	24	26	28
	Power KW	Theoretical speed r/min		Lift m									
PMP20 PMPA20	-1	1.1	2900	14	13	13	12	11	10	9	8	7	6
	-2	2.2	2900	27	27	26	25	24	23	22	20	18	15
	-3	4	2900	40	40	39	38	37	35	33	30	27	24
	-4	5.5	2900	54	53	52	51	49	47	44	41	37	33
	-5	5.5	2900	67	66	64	62	60	58	55	50	45	40
	-6	7.5	2900	81	79	77	75	73	70	66	61	55	49
	-7	7.5	2900	95	93	91	89	86	82	77	71	65	58
	-8	11	2900	109	107	105	102	98	94	89	82	75	67
	-9	11	2900	123	121	118	115	111	106	100	93	85	76
	-10	11	2900	136	134	131	128	124	118	111	103	95	85
	-11	15	2900	151	148	145	141	136	130	122	114	104	93
	-12	15	2900	164	162	158	154	149	142	133	124	114	102
	-13	15	2900	178	176	172	167	161	154	145	135	123	111
	-14	15	2900	192	189	185	180	174	166	156	145	133	119
	-15	18.5	2900	206	203	198	193	186	178	167	156	143	128
	-16	18.5	2900	220	217	212	206	199	190	179	166	152	136
	-17	18.5	2900	234	230	225	219	212	202	190	177	162	145

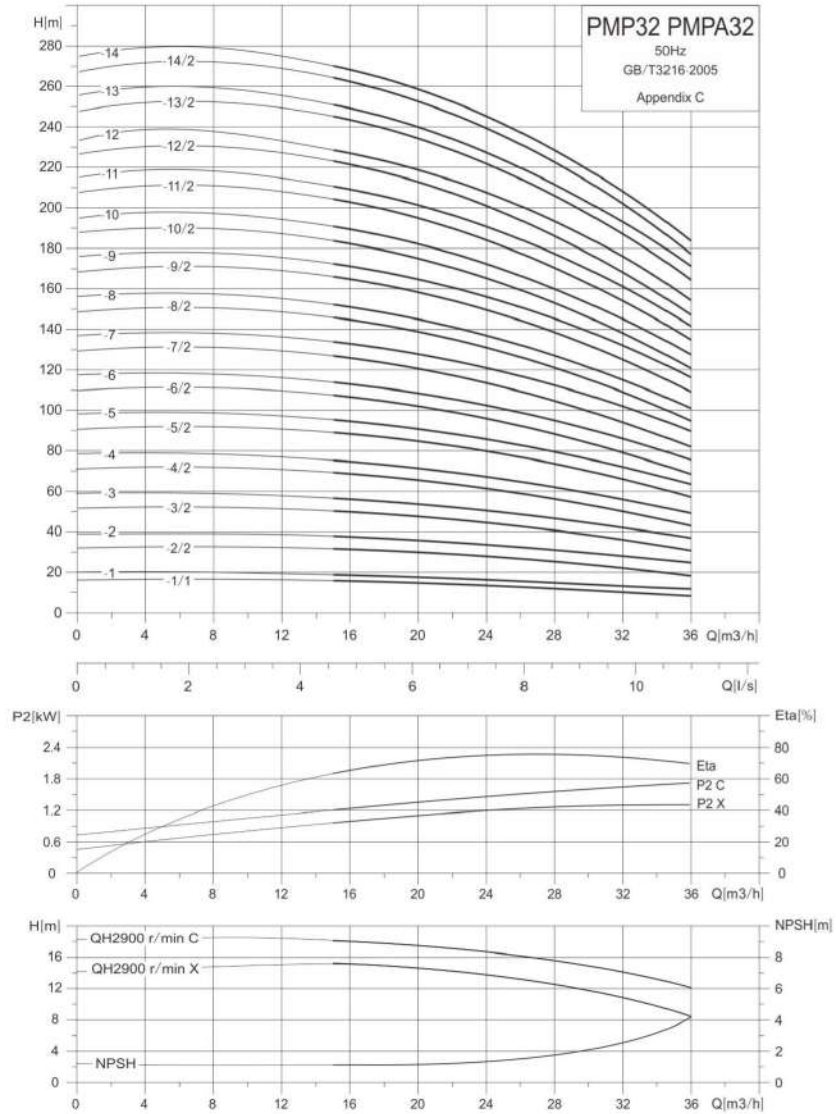
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm					weight kg	
	B1	B2	B1-B2	F1	F2	PMP	PMPA
PMP20 PMPA20	-1	340	244	584	151	125	37
	-2	355	287	642	171	138	45
	-3	405	355	760	214	169	59
	-4	474	383	857	257	190	77
	-5	519	383	902	257	190	78
	-6	564	383	947	257	190	83
	-7	609	383	992	257	190	85
	-8	740	501	1241	330	261	151
	-9	785	501	1286	330	261	153
	-10	830	501	1331	330	261	155
	-11	875	501	1376	330	261	166
	-12	920	501	1421	330	261	167
	-13	965	501	1466	330	261	169
	-14	1010	501	1511	330	261	170
	-15	1055	545	1600	330	261	191
	-16	1100	545	1645	330	261	193
	-17	1145	545	1690	330	261	194

■ Performance curve

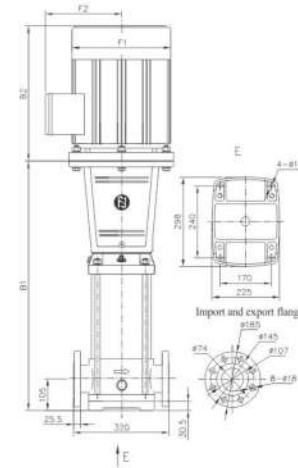


■ Performance data

Pump model	motor		Flow m³/h	Lift m						
	Power kW	Theoretical speed (r/min)		15	16	20	24	28	32	36
PMP32	1/1	1.5	2900	16	16	14	13	12	10	8
	1	2.2	2900	19	18	17	16	14	13	12
	2/2	3	2900	32	31	30	28	25	22	18
	2	4	2900	38	37	36	34	31	28	24
	3/2	5.5	2900	51	50	47	45	41	36	30
	3	5.5	2900	57	56	53	50	46	42	36
	4/2	7.5	2900	69	68	66	61	56	50	43
	4	7.5	2900	76	75	71	67	62	56	49
	5/2	11	2900	89	88	85	80	74	66	57
	5	11	2900	95	94	91	85	79	72	63
	6/2	11	2900	108	107	102	96	88	79	69
	6	11	2900	114	113	109	102	95	86	76
	7/2	15	2900	127	126	121	114	105	94	82
	7	15	2900	134	133	128	121	112	102	90
8/2	15	2900	146	145	139	131	121	109	94	
PMPA32	8	15	2900	152	151	145	137	127	115	101
	9/2	18.5	2900	166	165	158	150	139	125	109
	9	18.5	2900	173	171	165	157	145	132	117
	10/2	18.5	2900	184	182	175	166	153	138	121
	10	18.5	2900	191	190	182	173	160	145	128
	11/2	22	2900	205	203	196	184	171	154	135
	11	22	2900	211	209	202	191	178	161	142
	12/2	22	2900	223	222	214	201	186	168	147
	12	22	2900	229	227	220	208	194	176	155
	13/2	30	2900	246	244	235	223	207	187	165
	13	30	2900	251	249	240	228	212	193	172
	14/2	30	2900	265	263	254	239	223	202	178
	14	30	2900	271	269	259	246	229	208	184

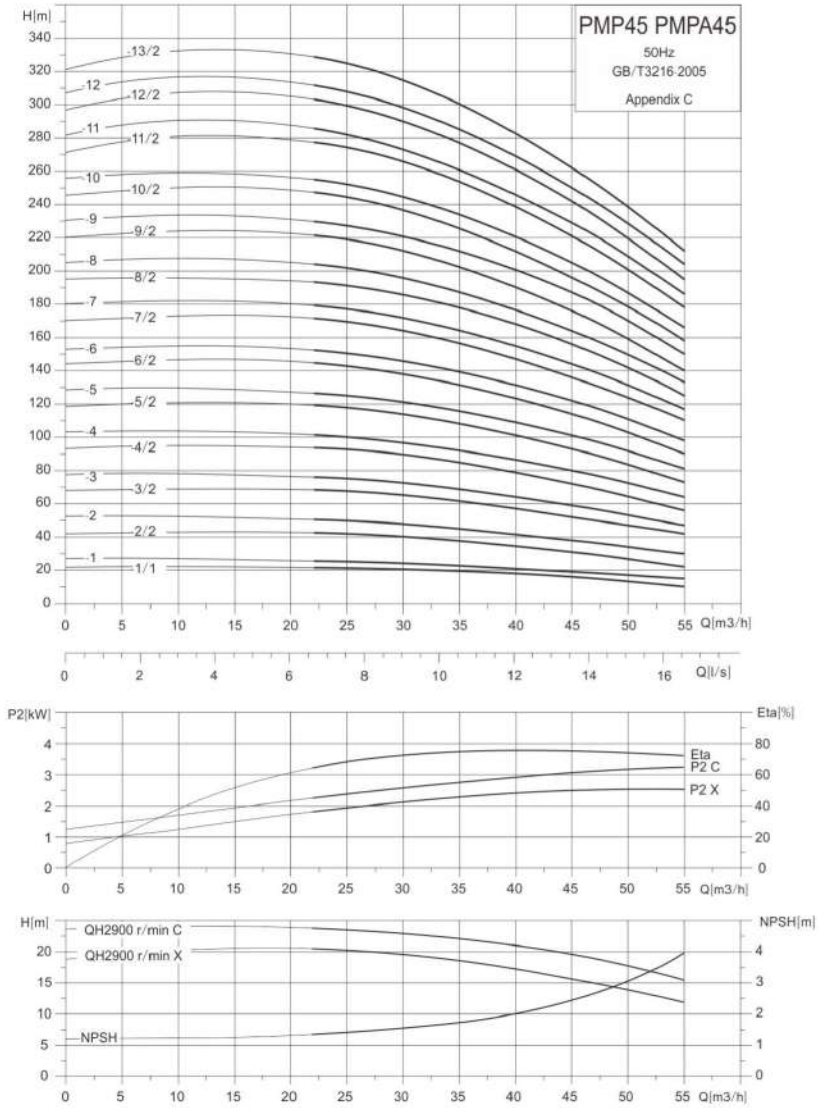
■ Dimension and weight

■ Installation sketch



Pump model	Dimension mm					weight kg		
	B1	B2	B1-B2	F1	F2	PMP	PMPA	
PMP32	1/1	460	287	747	171	138	67	69
	1	460	288	747	171	138	70	72
	2/2	530	347	877	196	150	80	82
	2	530	355	885	214	169	86	88
	3/2	600	383	983	257	190	103	105
	3	600	383	983	257	190	104	106
	4/2	670	383	1053	257	190	111	113
	4	670	383	1053	257	190	111	113
	5/2	835	501	1336	330	261	181	183
	5	835	501	1336	330	261	181	183
	6/2	905	501	1406	330	261	184	186
	6	905	501	1406	330	261	185	187
	7/2	975	501	1476	330	261	197	199
	7	975	501	1476	330	261	199	201
PMPA32	8/2	1045	501	1546	330	261	201	203
	8	1045	501	1546	330	261	202	204
	9/2	1115	545	1660	330	261	224	226
	9	1115	545	1660	330	261	225	227
	10/2	1185	545	1730	330	261	227	229
	10	1185	545	1730	330	261	228	230
	11/2	1255	577	1832	360	273	268	270
	11	1255	577	1832	360	273	268	270
	12/2	1325	577	1902	360	273	271	273
	12	1325	577	1902	360	273	271	273
	13/2	1395	652	2047	400	314	330	332
	13	1395	652	2047	400	314	331	333
	14/2	1465	652	2117	400	314	333	335
	14	1465	652	2117	400	314	334	336

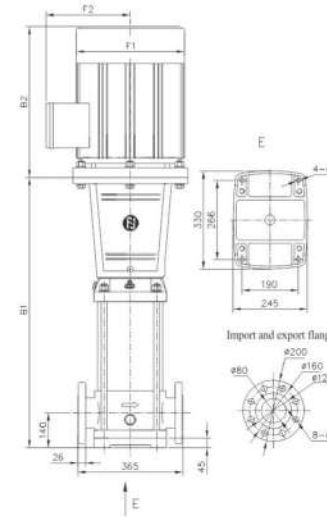
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	22	25	30	35	40	45	50	55
	Power KW	Theoretical speed r/min									
PMP45	-1/1	3	2900	22	21	20	18	17	16	13	10
	-1	4	2900	26	25	24	22	21	19	17	15
	-2/2	5.5	2900	42	41	40	37	35	31	27	22
	-2	7.5	2900	51	50	48	44	41	38	34	30
	-3/2	11	2900	68	67	65	61	56	52	47	40
	-3	11	2900	76	75	73	68	64	59	53	47
	-4/2	15	2900	93	92	90	85	79	72	64	56
	-4	15	2900	101	100	97	92	87	80	73	64
	-5/2	18.5	2900	119	118	114	108	101	93	83	73
	-5	18.5	2900	127	126	121	116	110	101	92	81
	-6/2	22	2900	144	143	138	131	124	114	103	90
	-6	22	2900	152	151	146	140	132	122	112	98
	-7/2	30	2900	171	169	165	156	147	136	124	111
	-7	30	2900	179	178	172	164	155	144	132	117
PMPA45	-8/2	30	2900	193	191	185	178	168	156	142	125
	-8	30	2900	204	202	196	188	177	164	150	133
	-9/2	30	2900	221	219	213	203	190	176	159	140
	-9	37	2900	230	228	221	211	200	187	170	150
	-10/2	37	2900	247	245	236	226	213	196	178	158
	-10	37	2900	255	253	245	234	220	205	187	166
	-11/2	45	2900	278	274	266	254	239	221	201	178
	-11	45	2900	286	283	273	260	246	229	209	186
	-12/2	45	2900	304	300	291	278	261	242	220	195
	-12	45	2900	312	308	298	285	270	250	228	204
-13/2	45	2900	330	325	316	300	283	262	239	212	

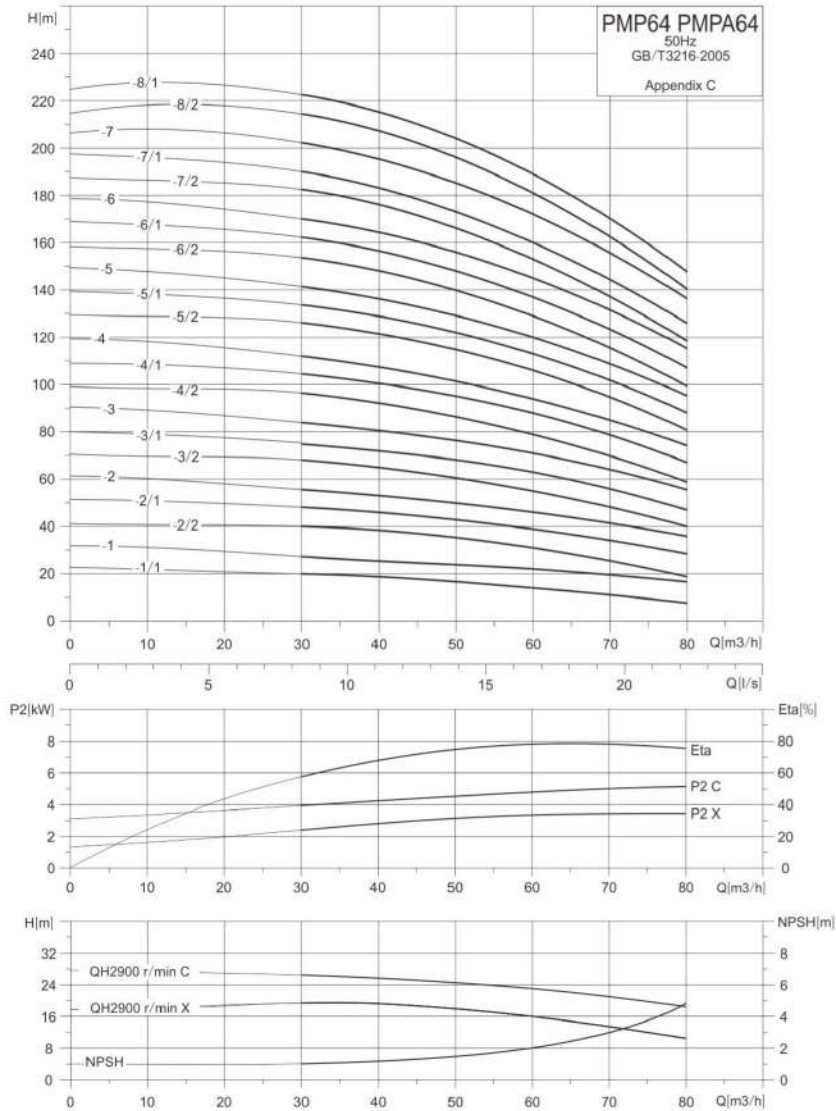
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm				weight kg		
	B1	B2	B1-B2	F1	F2	PMP	PMPA
-1/1	510	337	847	196	150	95	93
-1	510	355	865	214	169	100	98
-2/2	590	383	973	257	190	118	116
-2	590	383	973	257	190	122	120
-3/2	765	501	1266	330	261	192	190
-3	765	501	1266	330	261	192	190
-4/2	845	501	1346	330	261	205	203
-4	845	501	1346	330	261	205	203
-5/2	925	545	1470	330	261	228	226
-5	925	545	1470	330	261	228	226
-6/2	1005	577	1582	360	261	268	266
-6	1005	577	1582	360	261	268	266
-7/2	1085	652	1737	400	314	326	324
-7	1085	652	1737	400	314	326	324
-8/2	1165	652	1817	400	314	329	327
-8	1165	652	1817	400	314	329	327
-9/2	1245	652	1897	400	314	332	330
-9	1245	652	1897	400	314	355	353
-10/2	1325	652	1977	400	314	358	356
-10	1325	652	1977	400	314	358	356
-11/2	1405	669	2074	450	334	419	417
-11	1405	669	2074	450	334	419	417
-12/2	1485	669	2154	450	334	423	421
-12	1485	669	2154	450	334	423	421
-13/2	1565	669	2234	450	334	426	424

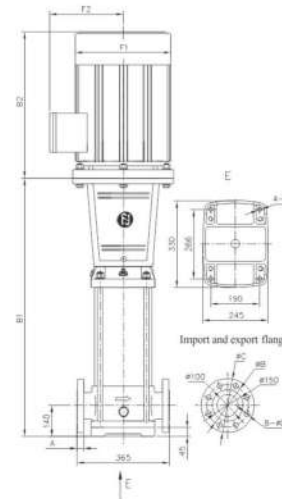
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	30	40	50	60	70	80
	Power KW	Theoretical speed r/min							
PMP64 PMPA64	-1/1	4	2900	20	19	16	14	12	8
	-1	5.5	2900	27	25	24	22	19	16
	-2/2	7.5	2900	40	38	36	31	26	18
	-2/1	11	2900	48	46	43	39	34	28
	-2	11	2900	55	53	49	46	42	36
	-3/2	15	2900	68	65	61	55	48	40
	-3/1	15	2900	75	72	68	63	56	47
	-3	18.5	2900	84	81	76	71	63	56
	-4/2	18.5	2900	96	92	86	79	71	59
	-4/1	22	2900	104	100	95	88	78	67
	-4	22	2900	112	107	102	94	85	75
	-5/2	30	2900	126	122	115	106	94	81
	-5/1	30	2900	134	129	122	113	102	88
	-5	30	2900	141	136	129	120	108	96
	-6/2	30	2900	154	148	140	129	116	99
	-6/1	37	2900	163	156	148	137	123	107
-6	37	2900	170	164	155	145	131	115	
-7/2	37	2900	182	176	166	153	137	118	
-7/1	37	2900	190	184	173	160	144	126	
-7	45	2900	202	195	185	172	155	136	
-8/2	45	2900	214	207	196	181	162	140	
-8/1	45	2900	223	215	203	189	170	147	

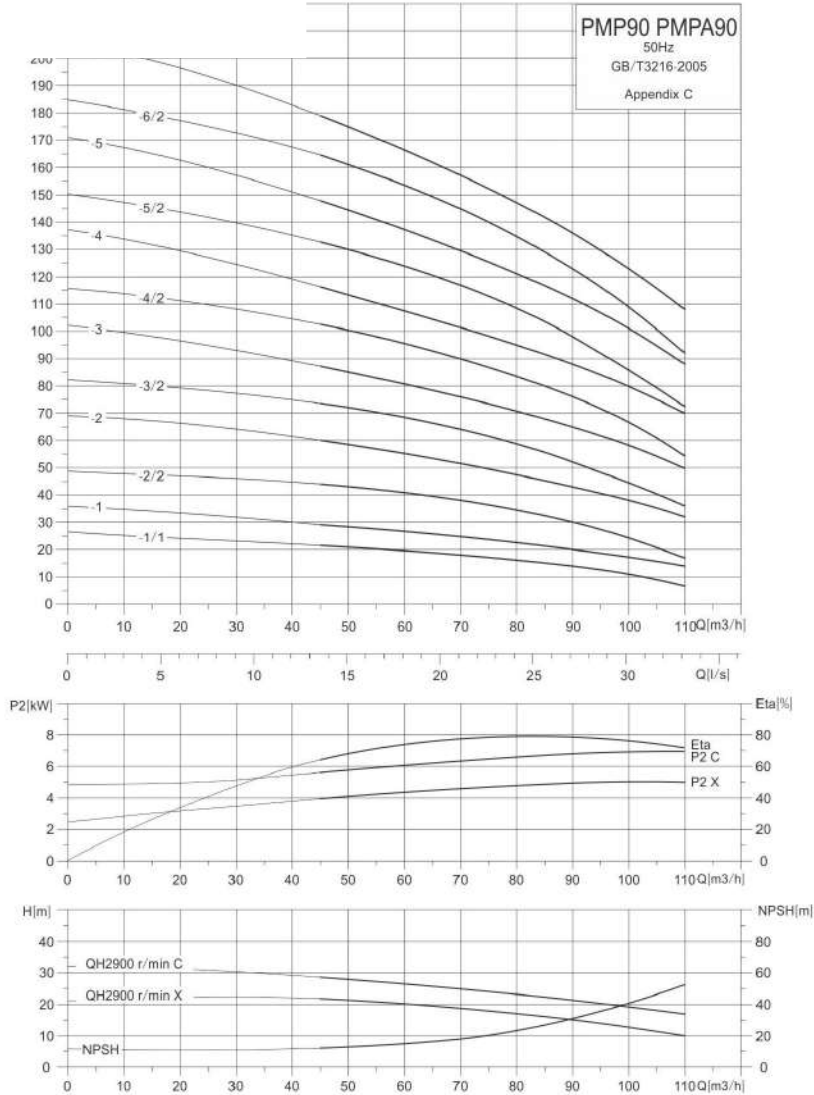
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm										weight kg	
	B1	B2	B1-B2	F1	F2	A	B	C	D	PMP	PMPA	
PMP64 PMPA64	-1/1	522	355	877	214	169	24	180	220	18	102	98
	-1	522	383	905	257	190	24	180	220	18	117	113
	-2/2	605	383	988	257	190	24	180	220	18	125	121
	-2/1	700	501	1201	330	261	24	180	220	18	192	188
	-2	700	501	1201	330	261	24	180	220	18	192	188
	-3/2	783	501	1284	330	261	24	180	220	18	206	202
	-3/1	783	501	1284	330	261	24	180	220	18	206	202
	-3	783	545	1328	330	261	24	180	220	18	226	222
	-4/2	866	545	1411	330	261	24	180	220	18	230	226
	-4/1	866	577	1443	360	273	24	180	220	18	267	263
	-4	866	577	1443	360	273	24	180	220	18	267	263
	-5/2	949	652	1601	400	314	24	180	220	18	328	324
	-5/1	949	652	1601	400	314	24	180	220	18	328	324
	-5	949	652	1601	400	314	24	180	220	18	328	324
	-6/2	1032	652	1684	400	314	28	190	235	22	332	328
	-6/1	1032	652	1684	400	314	28	190	235	22	355	351
-6	1032	652	1684	400	314	28	190	235	22	355	351	
-7/2	1115	652	1767	400	314	28	190	235	22	359	355	
-7/1	1115	652	1767	400	314	28	190	235	22	359	355	
-7	1115	669	1784	450	334	28	190	235	22	417	413	
-8/2	1198	669	1867	450	334	28	190	235	22	421	417	
-8/1	1198	669	1867	450	334	28	190	235	22	421	417	

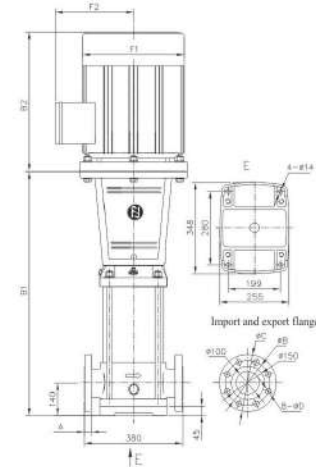
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	45	50	60	70	80	90	100	110	
	Power KW	Theoretical speed r/min										
PMP90 PMPA90	-1/1	5.5	2900	Lift m	22	21	20	18	16	14	11	7
	-1	7.5	2900		29	29	27	24	22	20	18	14
	-2/2	11	2900		44	43	41	38	35	30	24	17
	-2	15	2900		58	56	55	51	47	43	38	32
	-3/2	18.5	2900		73	72	68	64	58	52	44	35
	-3	22	2900		87	85	81	76	71	65	58	51
	-4/2	30	2900		102	100	96	90	84	76	66	55
	-4	30	2900		116	113	108	101	95	88	80	70
	-5/2	37	2900		132	130	124	117	109	98	86	73
	-5	37	2900		148	144	137	129	121	112	100	88
	-6/2	45	2900		165	161	154	145	135	123	109	92
	-6	45	2900		179	175	166	157	147	136	123	107

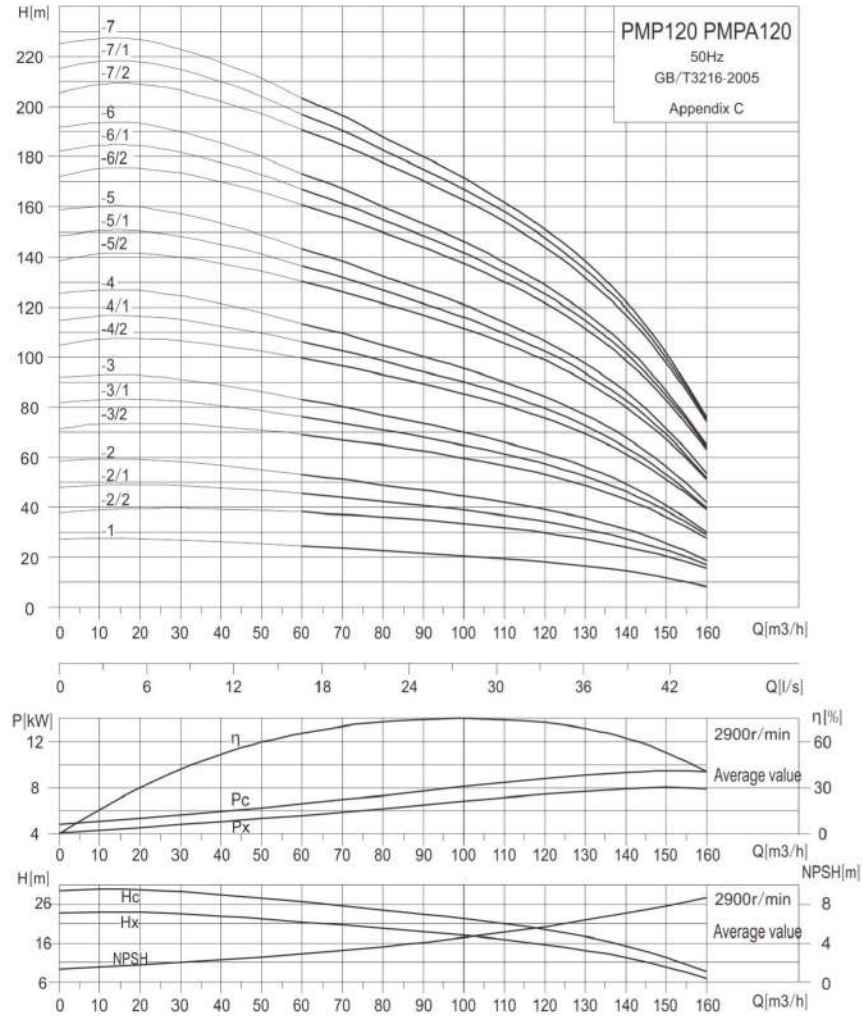
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm									weight kg		
	B1	B2	B1-B2	F1	F2	A	B	C	D	DBL	DBLT	
PMP90 PMPA90	-1/1	531	383	914	257	190	24	180	220	18	115	110
	-1	531	383	914	257	190	24	180	220	18	119	114
	-2/2	718	501	1219	330	261	24	180	220	18	193	188
	-2	718	501	1219	330	261	24	180	220	18	203	198
	-3/2	810	545	1355	330	261	24	180	220	18	231	226
	-3	810	545	1355	360	273	24	180	220	18	268	263
	-4/2	902	652	1554	400	314	24	180	220	18	332	327
	-4	902	652	1554	400	314	24	180	220	18	332	327
	-5/2	994	652	1646	400	314	28	190	235	22	362	357
	-5	994	652	1646	400	314	28	190	235	22	362	357
	-6/2	1086	669	1755	450	334	28	190	235	22	427	422
	-6	1086	669	1755	450	334	28	190	235	22	427	422

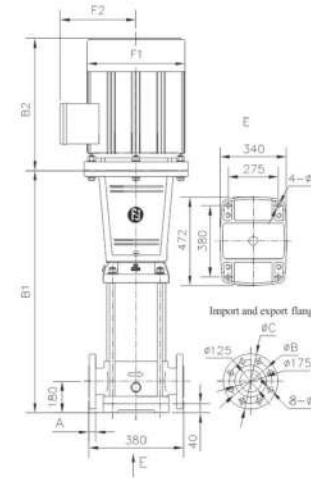
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	Lift m											
	Power KW	Theoretical speed r/min		60	70	80	90	100	110	120	130	140	150	160	
PMP120	-1	11	2950	25	24	23	22	21	20	18	17	14	12	9	
	-2/2	15	2950	38	37	36	35	34	32	30	27	24	21	16	
	-2/1	18.5	2950	45	44	42	41	39	37	34	31	28	23	17	
	-2	22	2950	53	51	49	47	45	42	39	36	31	26	19	
	-3/2	30	2950	69	67	65	63	60	57	53	49	43	36	28	
	-3/1	30	2950	76	74	71	68	65	61	57	52	46	39	29	
	-3	30	2950	83	80	77	74	70	66	62	56	50	41	30	
	-4/2	37	2950	100	96.3	93	90	86	81	76	69	61	51	39	
	-4/1	37	2950	106	102	99	94	90	85	80	73	64	53	40	
	-4	45	2950	113	109	105	100	96	90	84	77	68	56	42	
	-5/2	45	2950	130	126	121	117	111	106	99	91	80	67	51	
	-5/1	45	2950	136	132	127	121	116	110	102	94	83	69	52	
	-5	55	2950	143	138	132	127	121	114	107	98	86	72	54	
	-6/2	55	2950	161	156	150	144	137	130	122	111	99	83	63	
-6/1	55	2950	167	161	155	149	142	134	125	115	101	85	64		
-6	75	2950	173	167	160	153	146	138	129	118	104	87	65		
-7/2	75	2950	191	185	178	170	163	154	144	132	117	98	74		
-7/1	75	2950	197	190	183	175	167	158	148	135	120	100	75		
-7	75	2950	203	196	188	180	172	162	151	138	122	102	76		

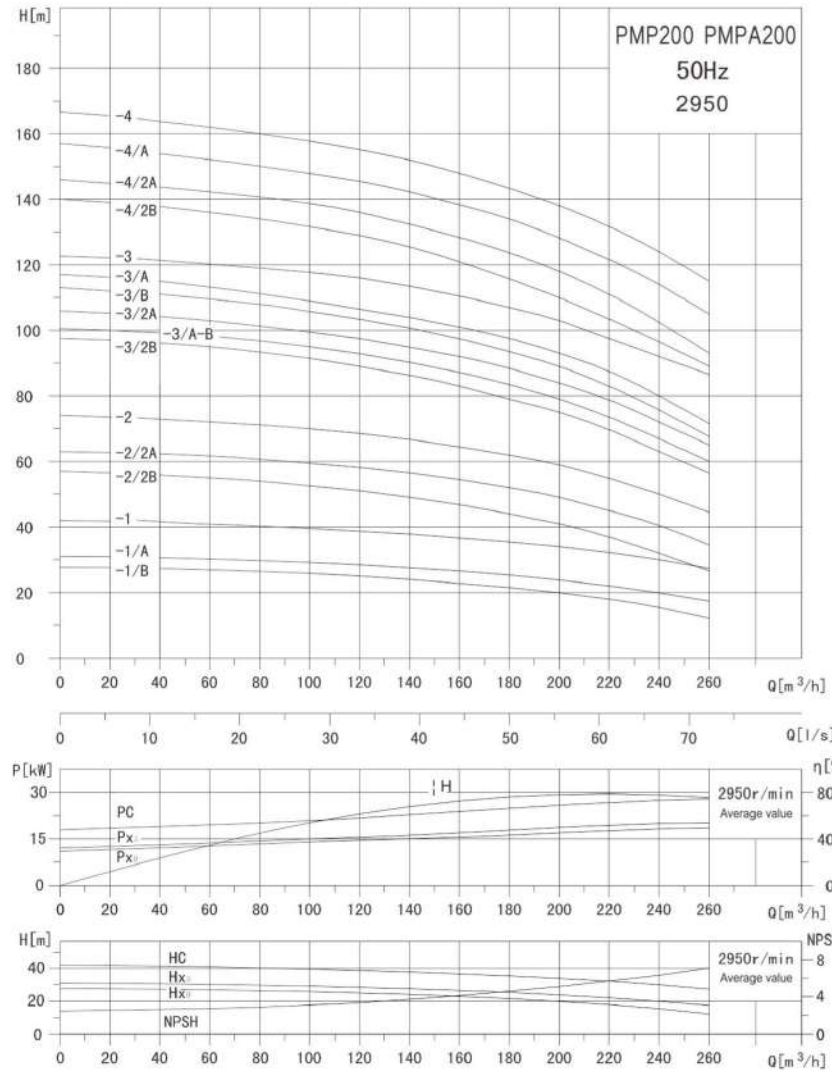
■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm									weight kg			
	B1	B2	B1-B2	F1	F2	A	B	C	D	PMP	PMPA		
PMP120	-1	786	501	1287	330	261	25	210	250	18	225	218	
	-2/2	946	501	1447	330	261	25	210	250	18	241	234	
	-2/1	946	545	1491	330	261	25	210	250	18	246	239	
	-2	946	577	1523	360	273	25	210	250	18	281	274	
	-3/2	1106	652	1758	400	314	25	210	250	18	357	350	
	-3/1	1106	652	1758	400	314	25	210	250	18	357	350	
	-3	1106	652	1758	400	314	25	210	250	18	357	350	
	-4/2	1266	652	1918	400	314	25	210	250	18	399	392	
	-4/1	1266	652	1918	400	314	25	210	250	18	399	392	
	-4	1266	669	1935	450	334	25	210	250	18	459	452	
	PMPA120	-5/2	1426	669	2095	450	334	25	210	250	18	472	465
		-5/1	1426	669	2095	450	334	25	210	250	18	472	465
		-5	1476	763	2239	484	367	25	210	250	18	577	570
		-6/2	1636	763	2399	484	367	25	210	250	18	590	583
-6/1		1636	763	2399	484	367	25	210	250	18	590	583	
-6		1636	831	2467	547	407	25	210	250	18	710	703	
-7/2		1796	831	2627	547	407	27	220	270	26	725	718	
-7/1	1796	831	2627	547	407	27	220	270	26	725	718		
-7	1796	831	2627	547	407	27	220	270	26	725	718		

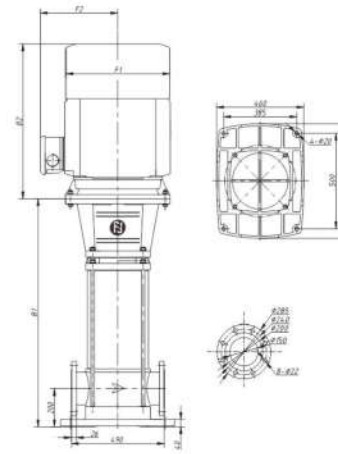
■ Performance curve



■ Performance data

Pump model	motor		Flow m³/h	100	120	140	160	180	200	220	240	260
	Power kW	Theoretical speed r/min										
PMP200 PMPA200	-1/B	18.5	2950	26	25	24	23	22	20	18	16	12
	-1/A	22	2950	29	28	28	27	25	24	22	20	17
	-1	30	2950	40	39	38	37	35	34	32	30	27
	-2/2B	37	2950	53	51	49	47	44	41	37	32	27
	-2/2A	45	2950	60	58	57	55	52	49	45	41	35
	-2/A	55	2950	70	69	67	65	62	59	55	50	45
	-2	55	2950	80	79	77	75	72	69	65	60	55
	-3/2B	75	2950	92	89	86	83	79	75	70	63	56
	-3/A-B	75	2950	95	93	90	87	84	79	74	67	60
	-3/2A	75	2950	100	98	95	92	88	84	79	72	65
	-3/B	75	2950	106	103	101	97	94	89	83	76	68
	-3/A	75	2950	109	107	104	101	98	93	88	80	72
	-3	90	2950	118	116	114	111	107	103	98	92	87
	-4/2B	90	2950	132	129	126	121	116	110	104	97	89
	-4/2A	110	2950	139	136	132	128	124	118	111	103	93
	-4/A	110	2950	148	146	142	138	134	128	122	114	105
	-4	110	2950	158	155	152	148	143	138	132	124	115

■ Installation sketch



■ Dimension and weight

Pump model	Dimension mm					weight kg	
	B1	B2	B+B2	F1	F2		
PMP200 PMPA200	-1/B	855	545	1400	330	261	306
	-1/A	855	577	1432	360	273	342
	-1	855	652	1507	400	314	398
	-2/2B	1049	652	1701	400	314	442
	-2/2A	1049	669	1718	450	334	499
	-2/A	1099	763	1862	484	367	590
	-2	1099	763	1862	484	367	590
	-3/2B	1293	831	2124	547	407	743
	-3/A-B	1293	831	2124	547	407	743
	-3/2A	1293	831	2124	547	407	743
	-3/B	1293	831	2124	547	407	743
	-3/A	1293	831	2124	547	407	743
	-3	1293	882	2175	547	407	812
	-4/2B	1487	882	2369	547	407	825
	-4/2A	1487	1020	2507	645	530	1175
	-4/A	1487	1020	2507	645	530	1175
	-4	1487	1020	2507	645	530	1175