

SHL,SHF,SHLT Series horizontal multistage centrifugal pump

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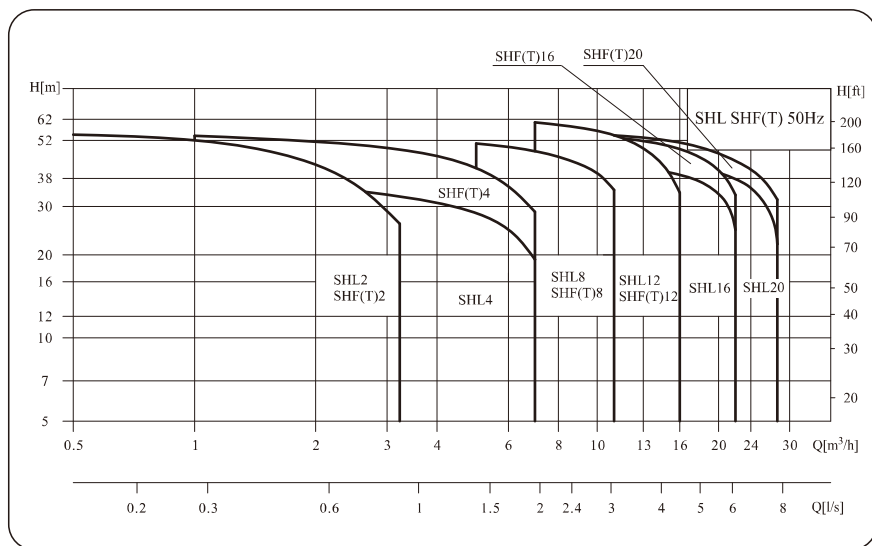
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When you open each page of our catalogue
It brings you not only surprise, but also trust and
commitment

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Performance Range



Specification

Key parameter	SHL2	SHL4	SHL8	SHL12	SHL16	SHL20
Rated Flow [m³/h]	2	4	8	12	16	20
Rated Flow [l/s]	0.56	1.1	2.2	3.3	4.4	5.6
Flow Range [m³/h]	0.6~3.2	1~7	5~11	7~16	8~22	10~28
Flow Range [l/s]	0.17~0.89	0.28~1.9	1.39~3	1.9~4.4	2.2~6.1	2.8~7.8
Max. Pressure [bar]	5.3	3.7	5	6	3.9	3.9
Motor Capacity [kW]	0.37~0.75	0.37~0.75	0.75~2.2	1.2~3	2.2~3	2.2~4
Temp. Range [°C]	-15~105					
Max. Efficiency [%]	46	58	62	63	66	69
Thread joint						
water outlet	Rp1	Rp1	Rp2	Rp2	Rp2	Rp2
Water inlet	Rp1	Rp1 $\frac{1}{4}$	Rp2	Rp2	Rp2	Rp2

Key parameter	SHF(T)2	SHF(T)4	SHF(T)8	SHF(T)12	SHF(T)16	SHF(T)20
Rated Flow [m³/h]	2	4	8	12	16	20
Rated Flow [l/s]	0.56	1.1	2.2	3.3	4.4	5.6
Flow Range [m³/h]	0.6~3.2	1~7	5~11	7~16	8~22	10~28
Flow Range [l/s]	0.17~0.89	0.28~1.9	1.39~3	1.9~4.4	2.2~6.1	2.8~7.8
Max. Pressure [bar]	5.3	5.6	5	6	5.3	5.3
Motor Capacity [kW]	0.37~0.75	0.37~1.1	0.75~2.2	1.2~3	2.2~4	2.2~4.4
Temp. Range [°C]	-15~105					
Max. Efficiency [%]	46	58	62	63	66	69
Thread joint						
water outlet	Rp1	Rp1	Rp1 $\frac{1}{4}$	Rp1 $\frac{1}{2}$	Rp2	Rp2
Water inlet	Rp1	Rp1 $\frac{1}{4}$	Rp1 $\frac{1}{2}$	Rp1 $\frac{1}{2}$	Rp2	Rp2

Model Description

SHL2/4/8/12/16/20

SHL 4 - 40
 Series/number of impeller × 10
 Rated Flow (m³/h)
 horizontal multistage centrifugal pump
 (Wet parts component made of SS 304 -316L)

SHF,SHFT2/4/8/12/16/20

SHF T 8 - 30
 Series/number of impeller × 10
 Rated Flow (m³/h)
 Water inlet/outlet cast iron seat
 (stainless steel not indicated)
 horizontal(sectional type)
 multistage centrifugal pump

Medium transporting

- Thin, Clean, non - flammable and explosive and not containing solid particles or fibers liquid.
- Nanyuan Pump can transport, such as mineral water, soft water, pure water, oil and other light chemical medium
- When the density or viscosity of conveying liquid is greater than the water, the pump must be with high power motor.
- Whether pump can be used for a particular liquid is depending on many factors, among which what important is the content of chloride, PH value, temperature and solvent, oil content, etc.

Working condition

- Liquid temperature:
 Normal temperature -15°C ~ +70°C
 Hot water operated -15°C ~ +105°C
- Max. environment temperature +40°C
- Max. working pressure: 10 Bar
- Maximum inlet pressure being limited by the maximum operating pressure

Typical applications

- Air conditioning system
- Cooling system
- industrial cleaning
- Water treatment(Purification of water)
- aquaculture
- Fertilization /measurement system
- Environmental applications
- Others

Motor

- The motor Motor is totally enclosed, air-cooled two pole machine Prote
- Protection grade: IP55
- Insulation class: F
- Standard voltage: 50Hz: 1 × 220 - 240V
 3 × 220-240V/380-415V
- Max. Power of single motor 2.4kW.

Curve condition

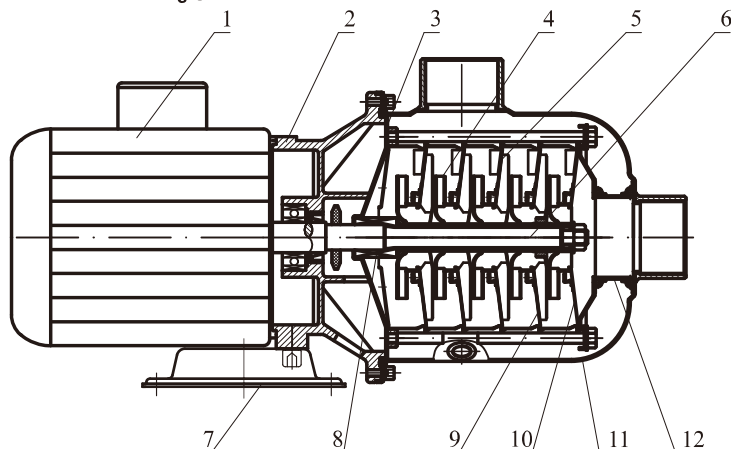
The following conditions apply to performance curve which will be show in this catalogue.

- All measure value of curves are based on the motor in a constant speed of 2900 RPM.
- Curve tolerance meets ISO9906, appendix A.
- Test with 20°C pure water(not air), kinematic viscosity 1mm²/s.
- Pump using referring to the performance range of thick lines, to prevent the motor from too small flow to produce overheat and too big flow to produce overload.

pump

- Horizontal multistage non self-priming centrifugal pump, with extended shaft motor
- Compact structure makes size of pump very small, axial inlet and radial outlet.

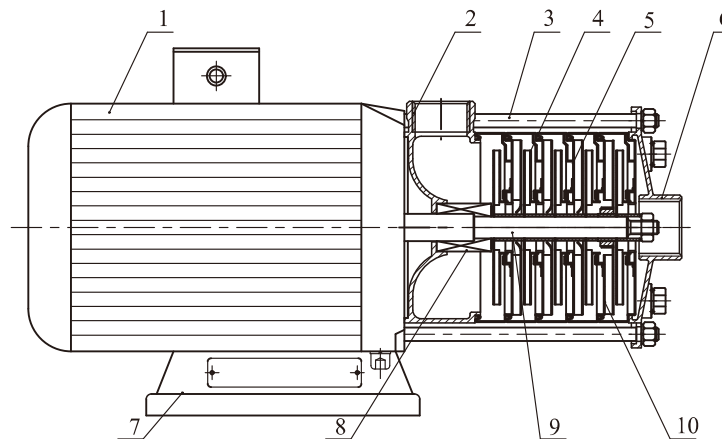
Cross-section drawing SHL



Material

No	Description	Material	AISI/ASTM	No	Description	Material	AISI/ASTM
1	Motor	Assembling unit		7	Base plate	Steel	AISI1015
2	Motor front housing	Aluminium alloy		8	Mechanical seal	Assembling unit	
3	Seal seat	Stainless	AISI304	9	Dupport diffuser	Stainless steel	AISI304
4	Impeller	Stainless	AISI304	10	Inlet guide vane	Stainless	AISI304
5	Diffuser	Stainless	AISI304	11	Casing	Stainless	AISI304
6	Shaft	Stainless	AISI304	12	Inlet pipeline	Stainless	AISI304

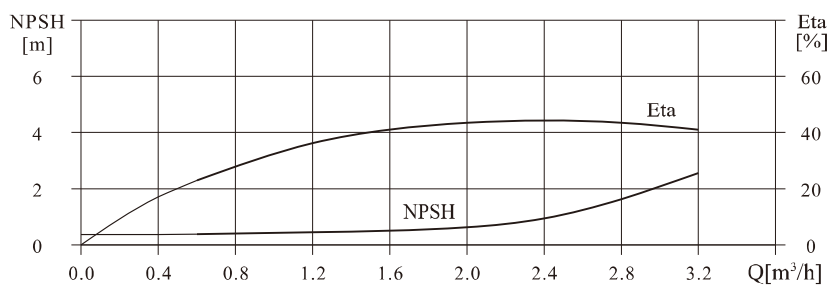
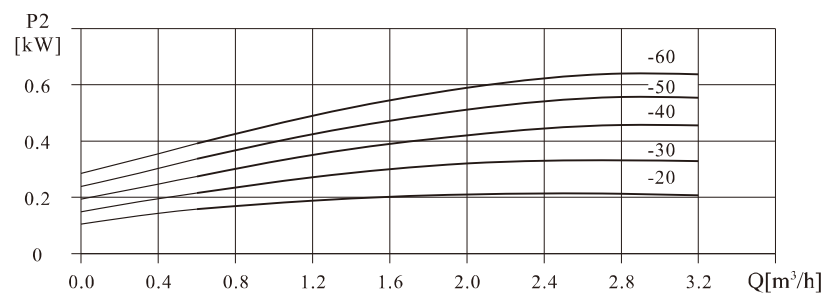
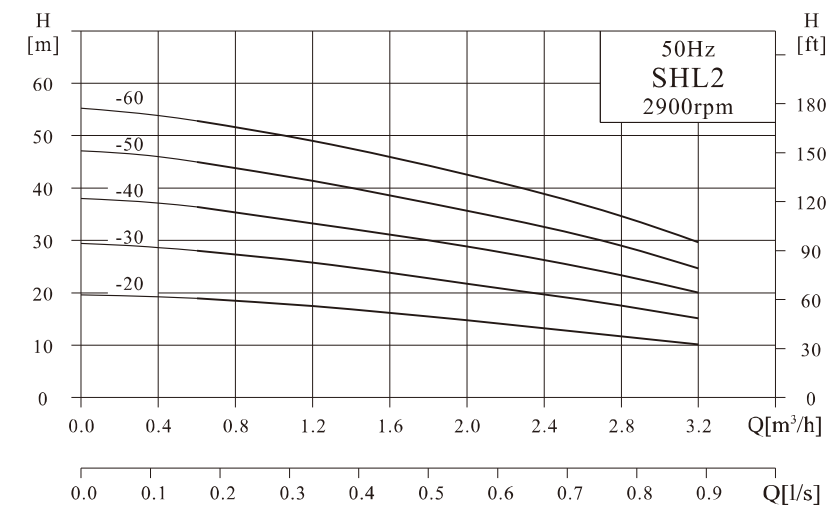
Cross-section drawing SHL



Material

NO	Description	Material	AISI/ASTM	NO	Description	Material	AISI/ASTM
1	Motor	Assembling unit		10	Dupport diffuser	Stainless	AISI304
3	Tie rod	Stainless	AISI304	SHF			
4	Impeller	Stainless	AISI304	2	Outlet seat	Stainless	AISI304
5	Diffuser	Stainless	AISI304	6	Inlet seat	Stainless	AISI304
7	Base plate	Steel	AISI11015	SHFT			
8	Mechanical seal	Assembling unit		2	Outlet seat	Cast Iron	ASTM25B
9	Shaft	Stainless	AISI304	6	Inlet seat	Cast Iron	ASTM25B

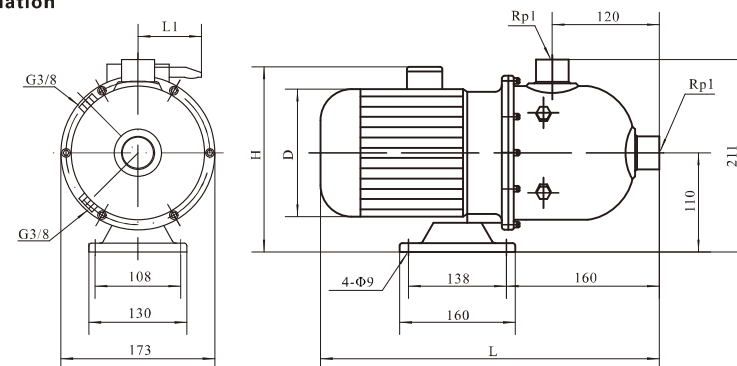
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m ³ /h)	0.6	1.2	1.6	2	2.4	2.8	3.2
	(kW)	(hp)								
SHL2-20	0.37	0.5	H (m)	18.6	17.6	16	15	13.5	10.6	9.3
SHL2-30	0.37	0.5		27.7	26	24	22	19.5	16.5	13.5
SHL2-40	0.55	0.75		35.7	34	32	29	25.5	23.5	19
SHL2-50	0.55	0.75		45	42	39	36	33	28	24.5
SHL2-60	0.75	1		53	50	47.5	43.5	39	34	29.5

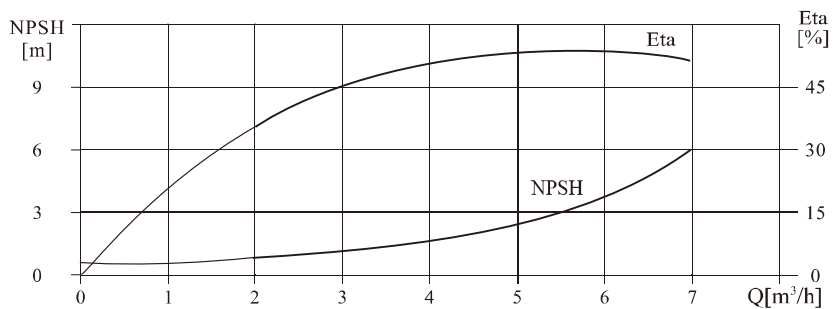
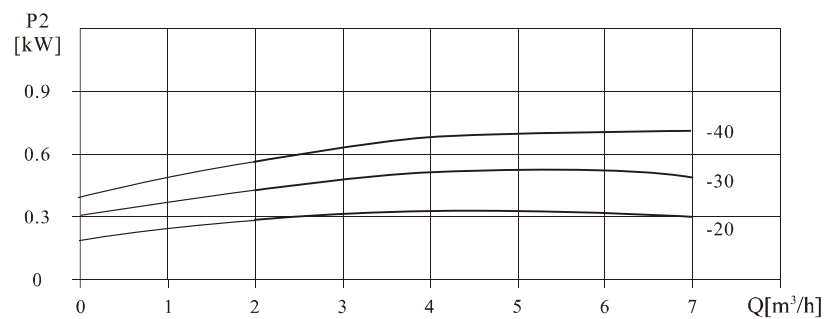
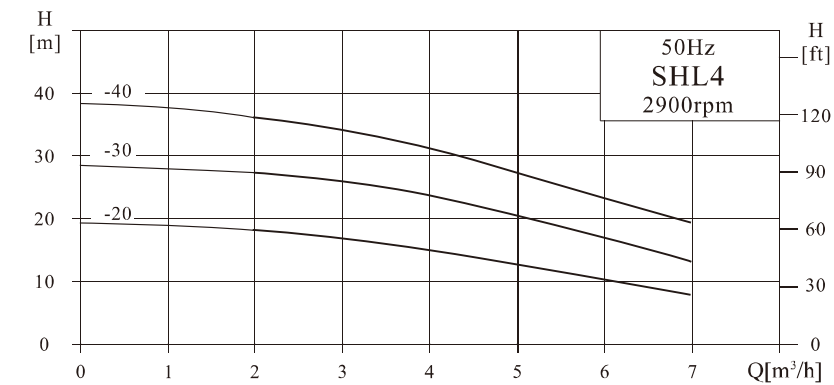
Installation



Size and Weight

Motor	Model	Specification (mm)				Weight (kg)
		L	D	H	L1	
Three phase /Single phase	SHL2-20	400	145	215/230	/96	13
	SHL2-30	400	145	215/230	/96	13
	SHL2-40	400	145	215/230	/96	13
	SHL2-50	400	145	215/230	/96	13
	SHL2-60	445	170	225/245	/100	14

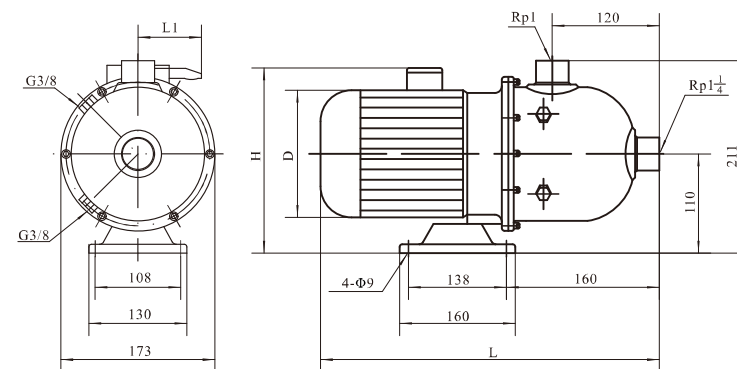
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m³/h)	1	2	3	4	5	6	7
	(kW)	(hp)								
SHL4-20	0.37	0.55	H (m)	19	18	17	15	12.5	10	7.5
SHL4-30	0.55	0.75		28	27	26	23.5	20.5	17	13
SHL4-40	0.75	1		37.5	36	34	31	27	23	19

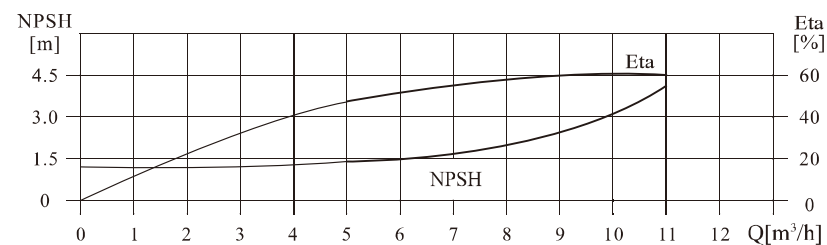
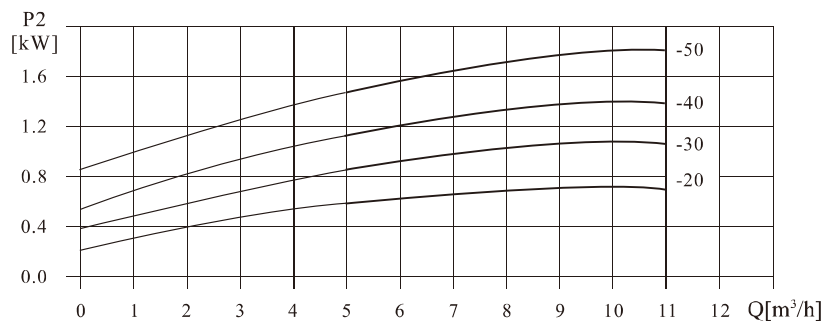
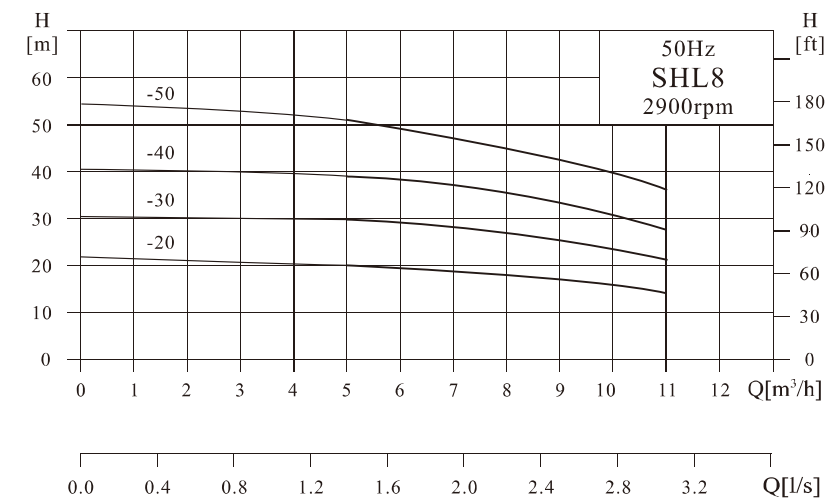
Installation



Size and Weight

Motor	Model	Specification (mm)				Weight (kg)
		L	D	H	L1	
Three phase /Single phase	SHL4-20	400	145	215/230	/96	12
	SHL4-30	400	145	215/230	/96	13
	SHL4-40	445	170	225/245	/100	15

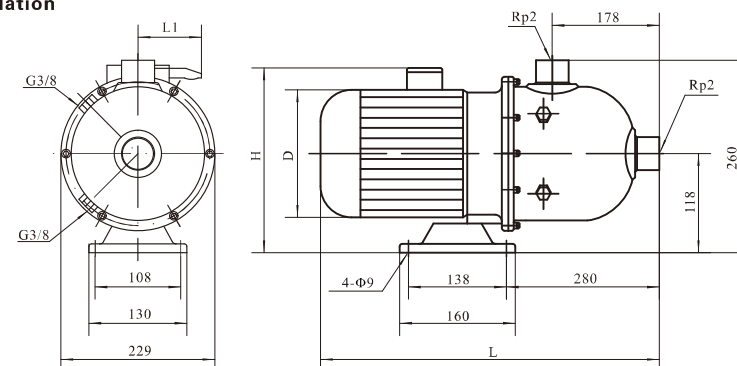
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m³/h)	5	6	7	8	9	10	11
	(kW)	(hp)								
SHL8-20	0.75	1	H (m)	19.5	19	18.5	17.5	16.5	15	13.5
SHL8-30	1.1	1.5		29	28.5	27.5	26.5	24	22	20
SHL8-40	1.5	2		39	38	36.5	35	32	29.5	26
SHL8-50	2.2	3		50.5	49	46.5	44	41	38	33

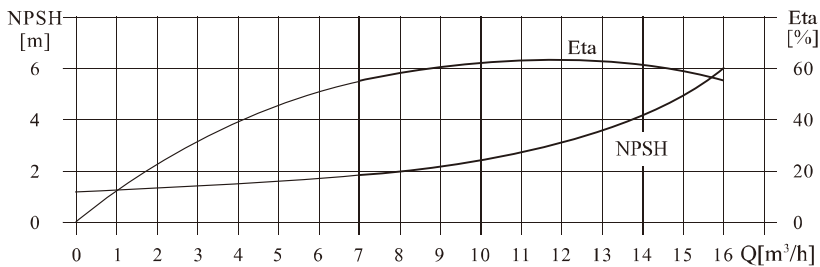
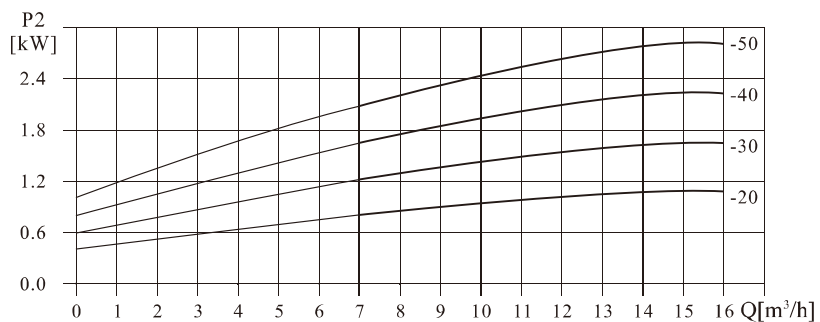
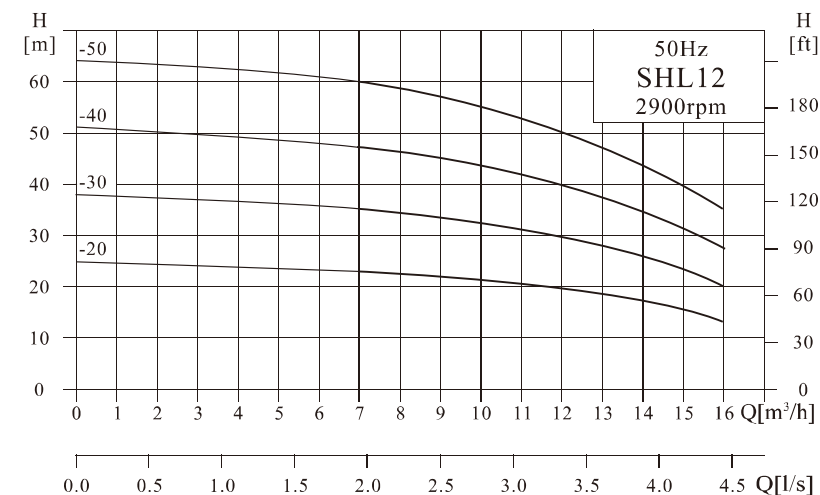
Installation



Size and Weight

Motor	Model	Specification (mm)				Weight (kg)
		L	D	H	L1	
Three phase /Single phase	SHL8-20	560	170	230/265	/100	20
	SHL8-30	560	170	230/265	/100	23
	SHL8-40	580	180	240/270	/100	25
	SHL8-50	580	180	240/270	/100	29

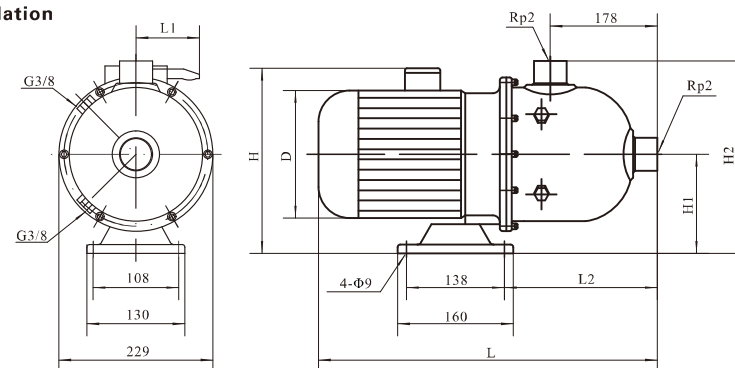
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m³/h)	H (m)						
	(kW)	(hp)		7	9	11	12	13	15	16
SHL12-20	1.2	1.6	H (m)	23	22	20.5	19.5	18.5	15.5	13
SHL12-30	1.8	2.4		35	33.5	31	29.5	28	23.5	20
SHL12-40	2.4	3.3		47	45	41.5	39.5	37.5	31.5	27.5
SHL12-50	3	4		60	56.5	52.5	50	47	40	35

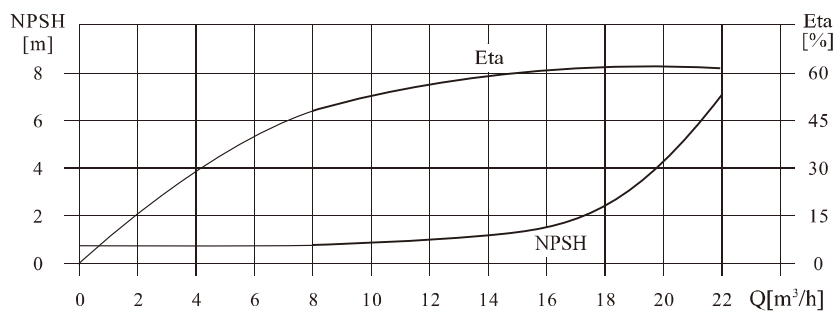
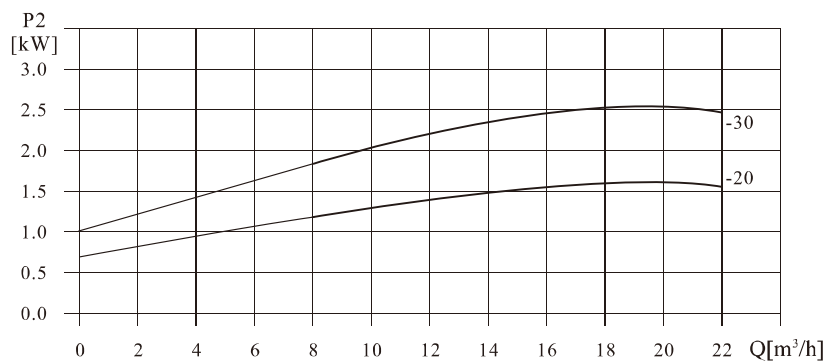
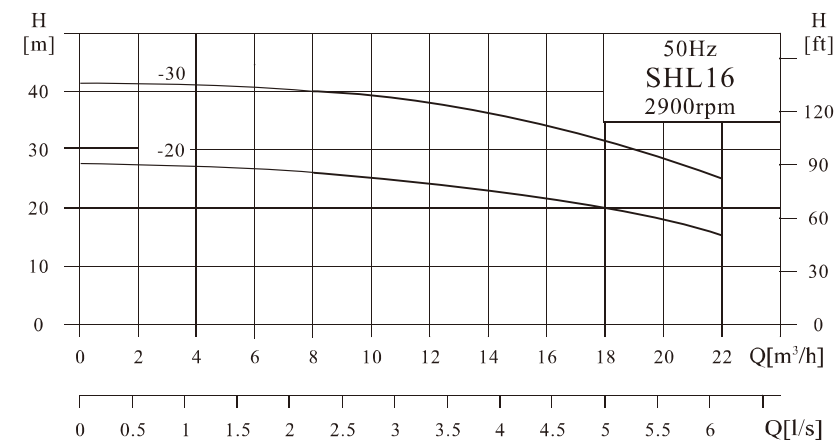
Installation



Size and Weight

Motor	Model	Specification (mm)							Weight (kg)
		L	L1	L2	H	H1	H2	D	
Three phase /Single phase	SHL12-20	560	/100	280	230/265	118	260	170	21
	SHL12-30	580	/100	280	240/270	118	260	170	25
	SHL12-40	580	/100	280	240/270	118	260	180	28
	SHL12-50	610		270	270/	126	268	180	33

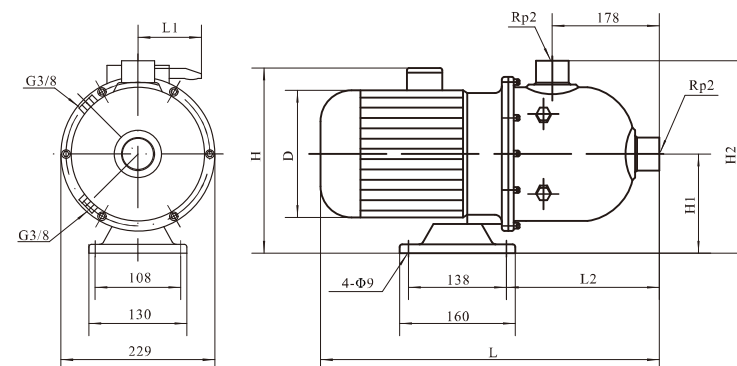
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m ³ /h)	8	10	12	14	16	18	20	22
	(kW)	(hp)									
SHL16-20	2.2	3	H (m)	26	25	24	23	21.6	20	18	15.5
SHL16-30	3	4		40	39	38	36	34	31.5	29	25

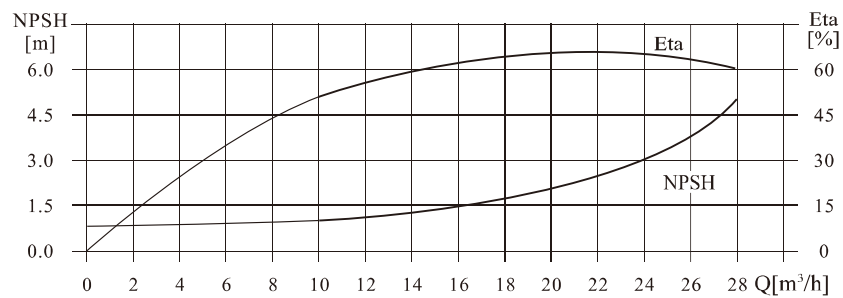
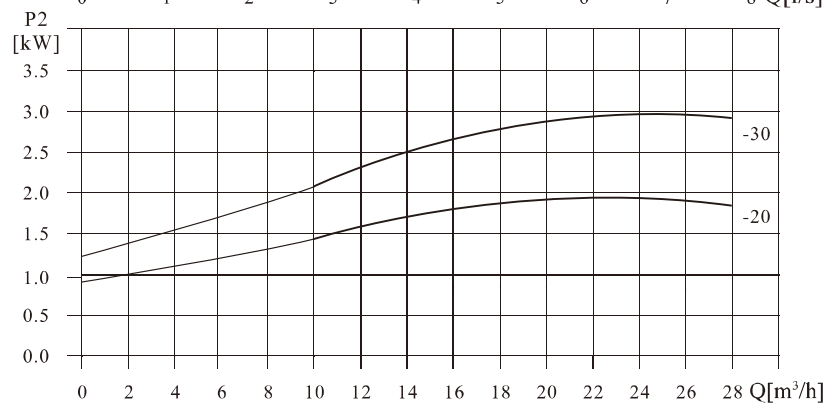
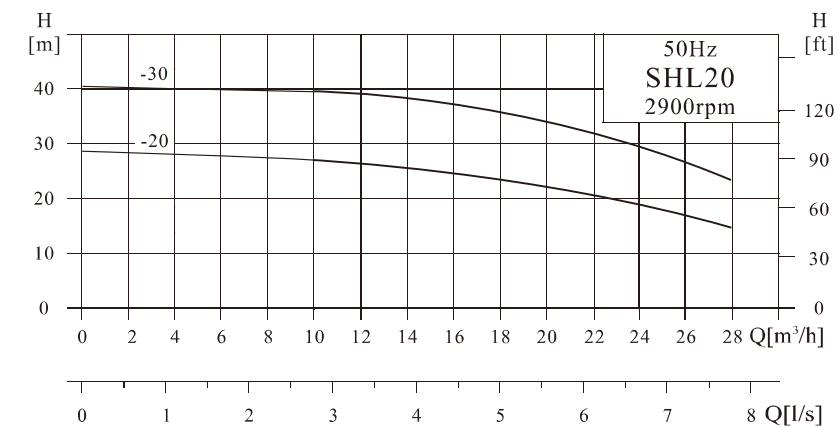
Installation



Size and Weight

Motor	Model	Specification (mm)							Weight (kg)
		L	L1	L2	H	H1	H2	D	
Three phase /Single phase	SHL16-20	580	/100	280	240/270	118	260	180	26
	SHL16-30	610		270	270/	126	268	195	33

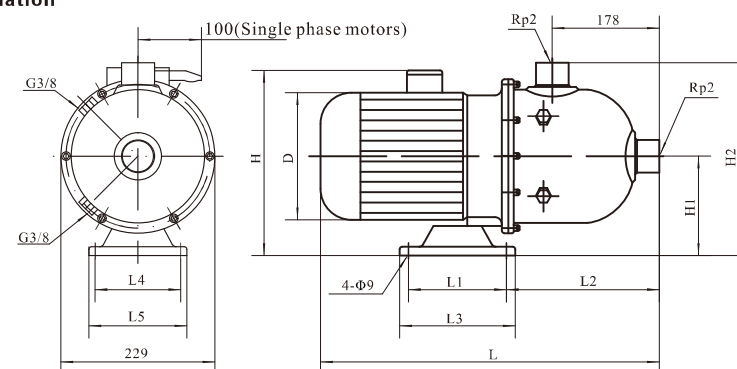
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m ³ /h)	10	14	16	18	20	22	24	28
	(kW)	(hp)									
SHL20-20	2.2	3	H (m)	27	25.5	25	23.5	22	20.5	18.5	14.5
SHL20-30	4	5.5		39.5	38	37.5	35.5	34	31	29	23

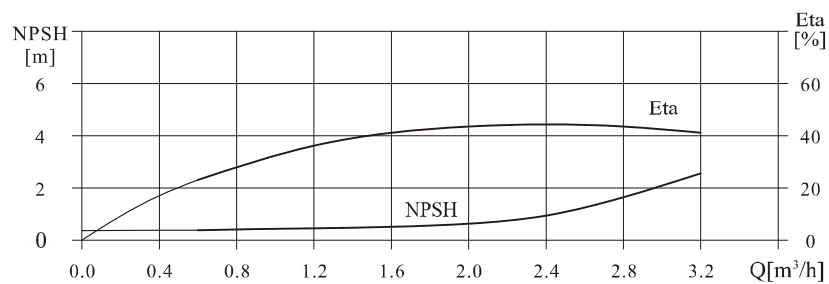
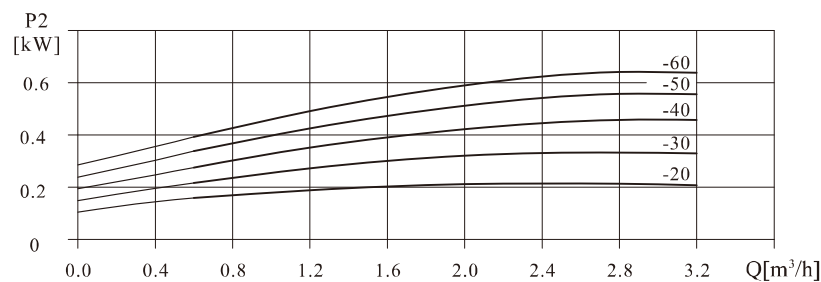
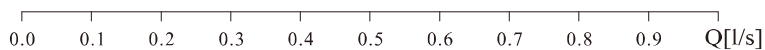
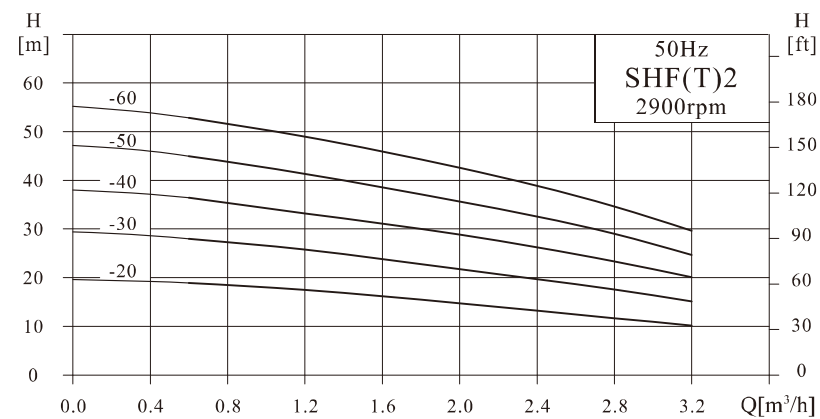
Installation



Size and Weight

Motor	Specification (mm)											Weight (kg)
	L	L1	L2	L3	L4	L5	Hthree phase	Hsingle phase	H1	H2	D	
SHL20-20	580	138	280	160	108	130	240	270	118	260	180	28
SHL20-30	650	140	360	170	190	230	270		120	262	220	41

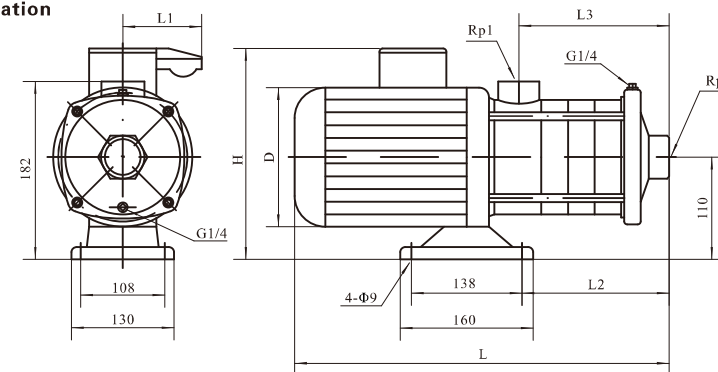
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m³/h)	0.6	1.2	1.6	2	2.4	2.8	3.2
	(kW)	(hp)								
SHF(T)2-20	0.37	0.5	H (m)	18.6	17.6	16	15	13.5	10.6	9.3
SHF(T)2-30	0.37	0.5		27.7	26	24	22	19.5	16.5	13.5
SHF(T)2-40	0.55	0.75		35.7	34	32	29	25.5	23.5	19
SHF(T)2-50	0.55	0.75		45	42	39	36	33	28	24.5
SHF(T)2-60	0.75	1		53	50	47.5	43.5	39	34	29.5

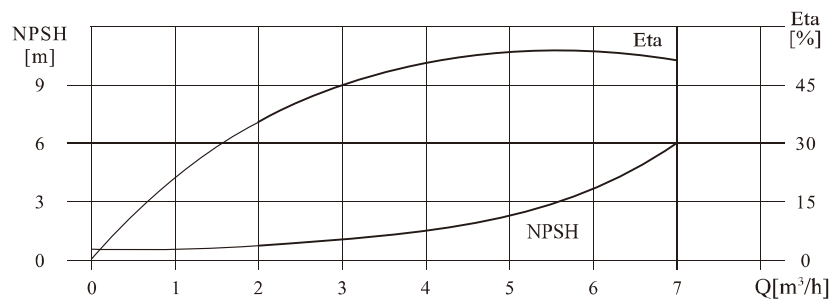
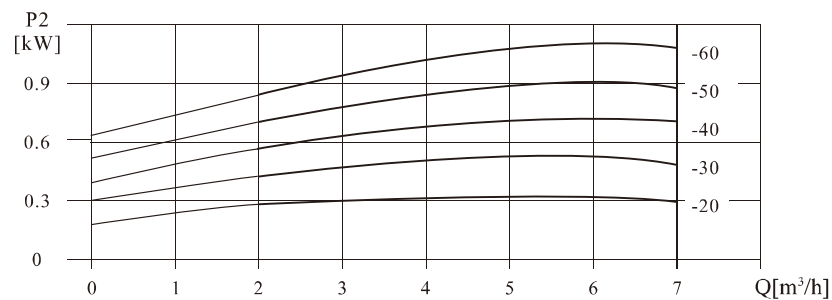
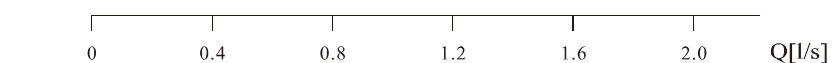
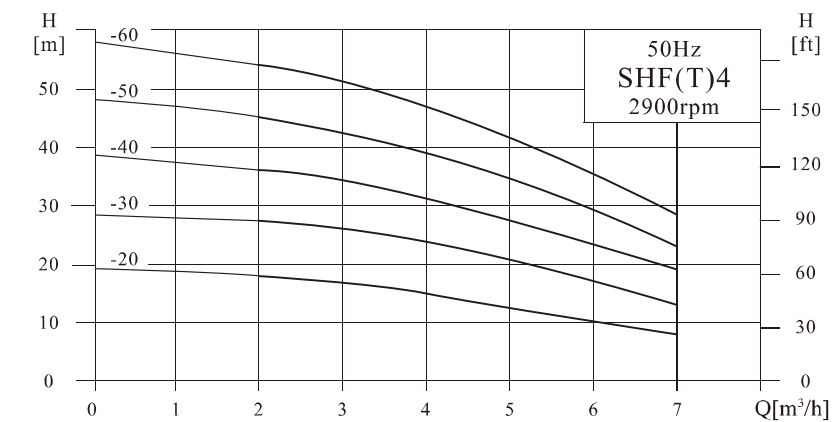
Installation



Size and Weight

Motor	Model	Specification (mm)						Weight (kg)
		L	L1	L2	L3	H	D	
Three phase /Single phase	SHF(T)2-20	305	/96	87	84	215/230	145	13
	SHF(T)2-30	323	/96	105	102	215/230	145	13
	SHF(T)2-40	341	/96	123	120	215/230	145	14
	SHF(T)2-50	359	/96	141	138	215/230	145	14
	SHF(T)2-60	422	/100	159	156	225/245	170	16

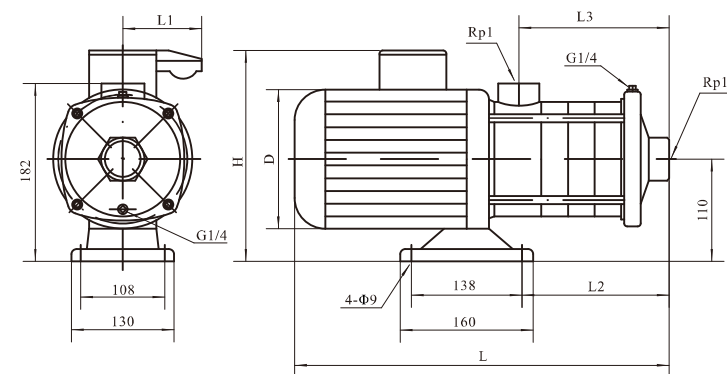
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m ³ /h)	1	2	3	4	5	6	7
	(kW)	(hp)								
SHF(T)4-20	0.37	0.55	H (m)	19	18	17	15	12.5	10	7.5
SHF(T)4-30	0.55	0.75		28	27	26	23.5	20.5	17	13
SHF(T)4-40	0.75	1		37.5	36	34	31	27	23	19
SHF(T)4-50	1.1	1.5		47	45	42.5	39	34	29	23
SHF(T)4-60	1.1	1.5		56	54	51	47	41.5	35.5	28

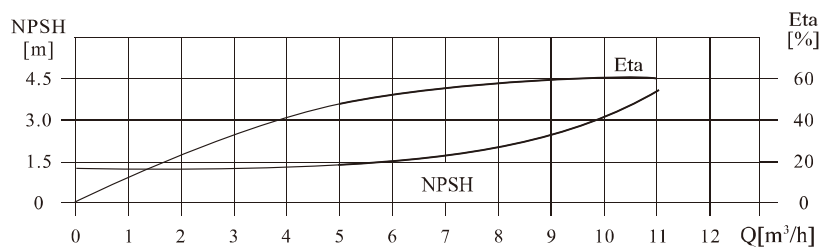
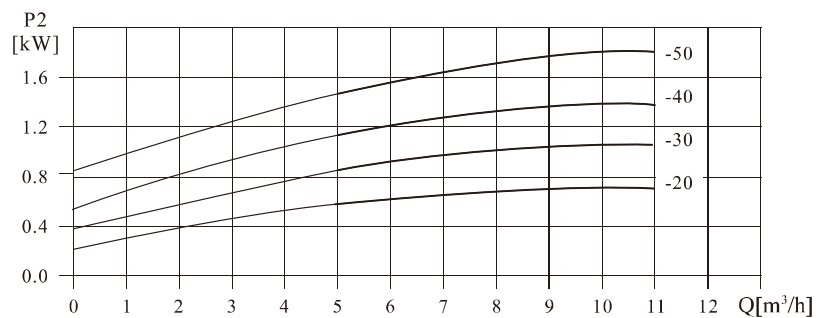
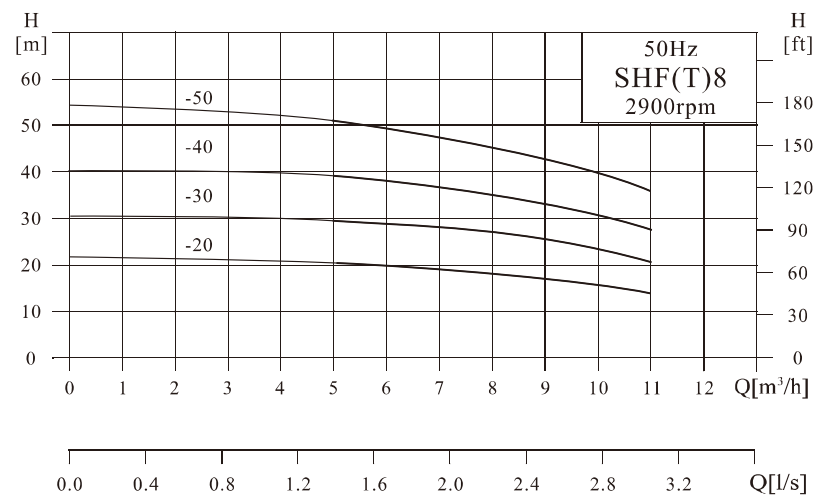
Installation



Size and Weight

Motor	Model	Specification (mm)						Weight (kg)
		L	L1	L2	L3	H	D	
Three phase /Single phase	SHF(T)4-20	329	/96	105	102	215/230	145	12
	SHF(T)4-30	356	/96	132	129	215/230	145	13
	SHF(T)4-40	416	/100	159	156	225/245	170	14
	SHF(T)4-50	455	/100	188	183	225/245	170	16
	SHF(T)4-60	482	/100	215	210	225/245	170	16

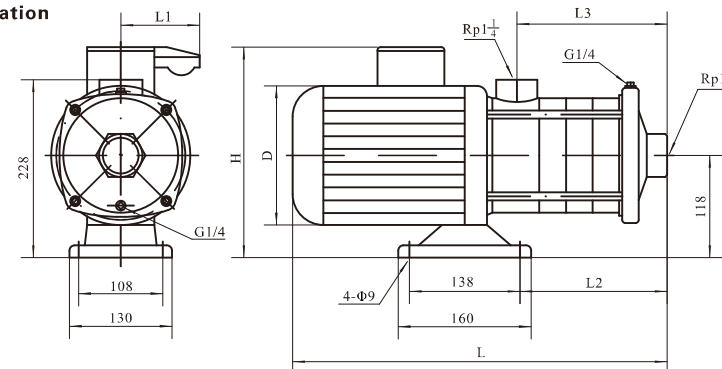
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m³/h)	5	6	7	8	9	10	11
	(kW)	(hp)								
SHF(T)8-20	0.75	1	H (m)	19.5	19	18.5	17.5	16.5	15	13.5
SHF(T)8-30	1.1	1.5		29	28.5	27.5	26.5	24	22	20
SHF(T)8-40	1.5	2		39	38	36.5	35	32	29.5	26
SHF(T)8-50	2.2	3		50.5	49	46.5	44	41	38	33

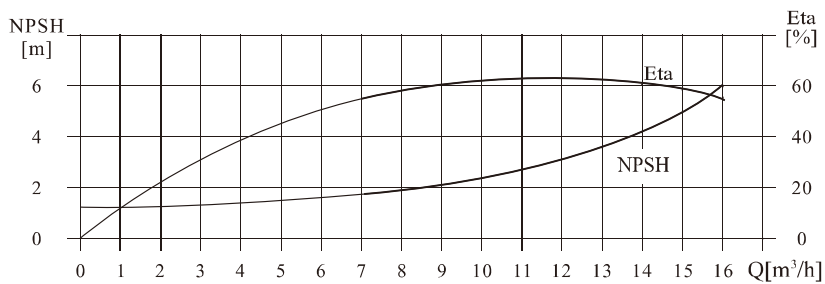
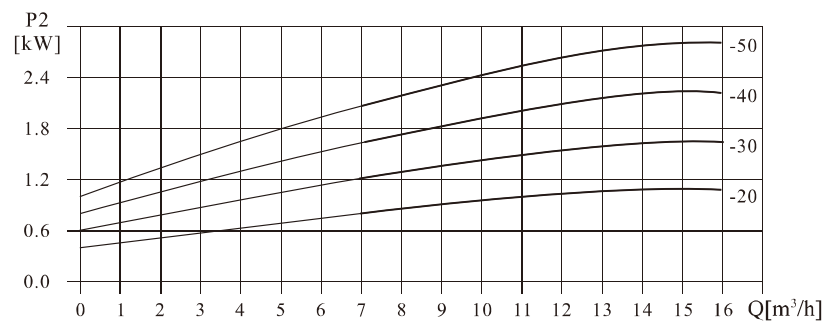
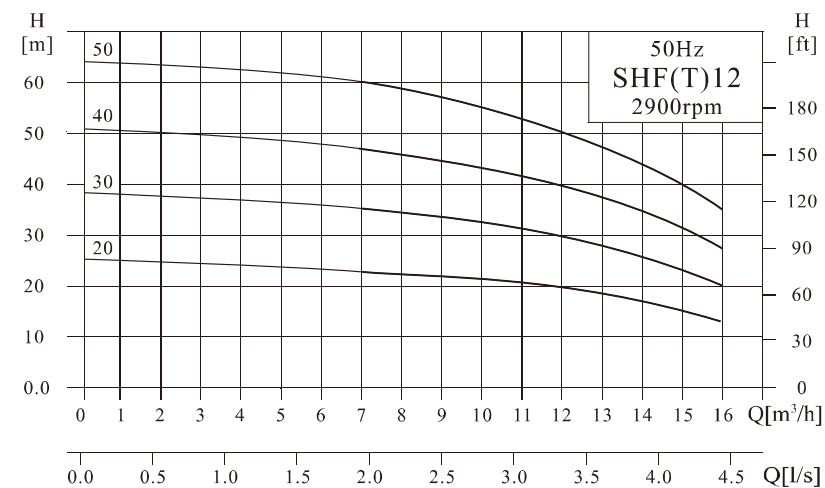
Installation



Size and Weight

Motor	Model	Specification (mm)						Weight (kg)
		L	L1	L2	L3	H	D	
Three phase /Single phase	SHF(T)8-20	395	/100	126	108	230/265	170	20
	SHF(T)8-30	425	/100	156	138	230/265	170	24
	SHF(T)8-40	490	/100	186	168	240/270	180	28
	SHF(T)8-50	520	/100	216	198	240/270	180	30

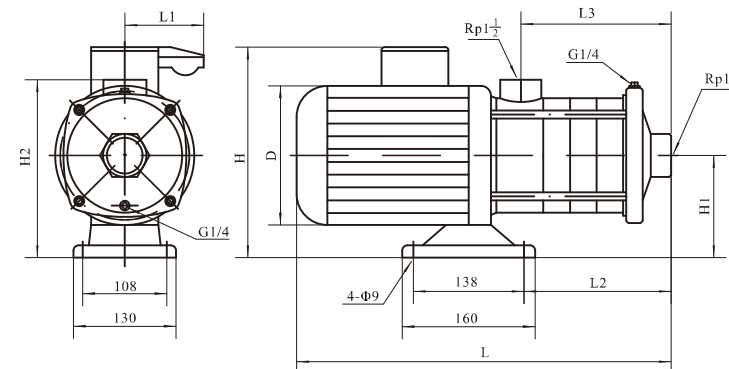
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m ³ /h)	7	9	11	12	13	15	16
	(kW)	(hp)								
SHF(T)12-20	1.2	1.6	H (m)	23	22	20.5	19.5	18.5	15.5	13
SHF(T)12-30	1.8	2.4		35	33.5	31	29.5	28	23.5	20
SHF(T)12-40	2.4	3.3		47	45	41.5	39.5	37.5	31.5	27.5
SHF(T)12-50	3	4		60	56.5	52.5	50	47	40	35

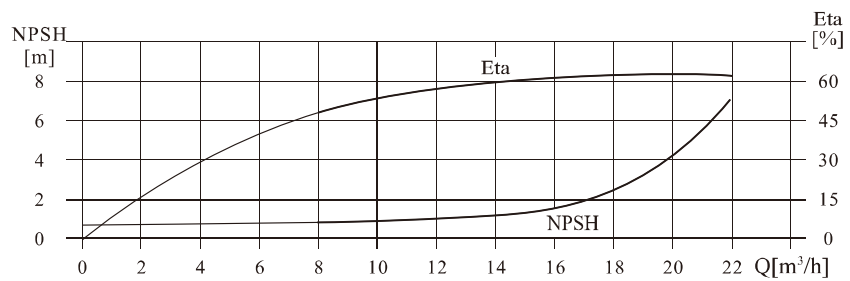
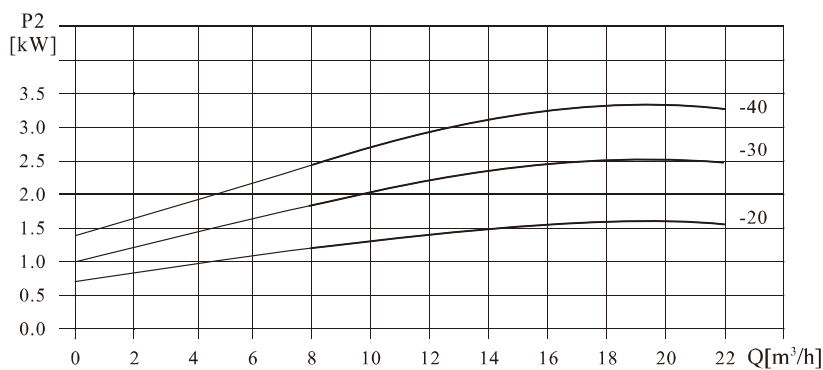
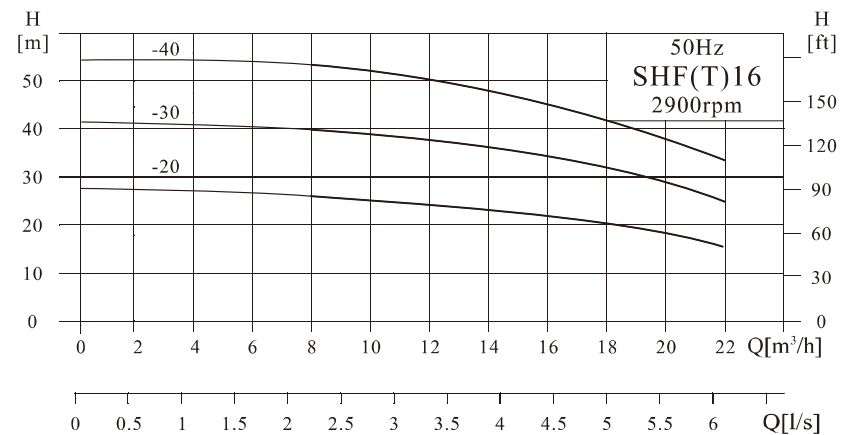
Installation



Size and Weight

Motor	Model	Specification (mm)							Weight (kg)	
		L	L1	L2	L3	H	H1	H2		D
Three phase /Single phase	SHF(T)12-20	395	/100	126	108	230/265	118	228	170	21
	SHF(T)12-30	460	/100	156	138	240/270	118	228	180	25
	SHF(T)12-40	490	/100	186	168	240/270	118	228	180	29
	SHF(T)12-50	555		216	198	270/	126	240	195	34

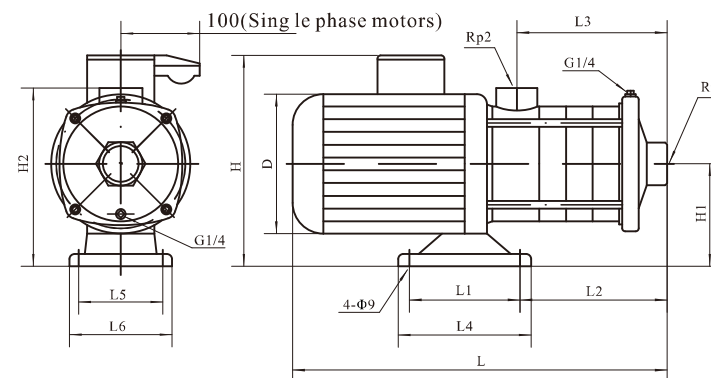
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m³/h)	8	10	12	14	16	18	20	22
	(kW)	(hp)									
SHF(T)16-20	2.2	3	H (m)	26	25	24	23	21.6	20	18	15.5
SHF(T)16-30	3	4		40	39	38	36	34	31.5	29	25
SHF(T)16-40	4	5.5		53.5	52	50	48	45	42	38	33.5

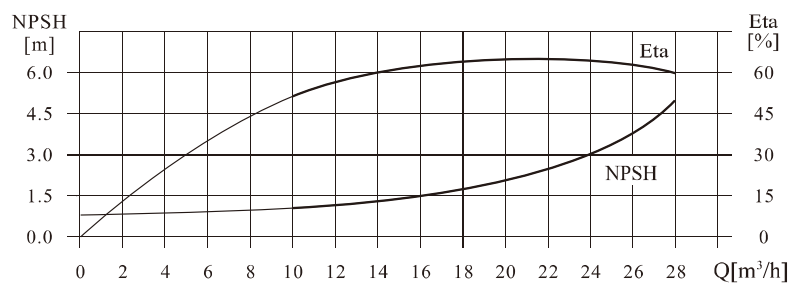
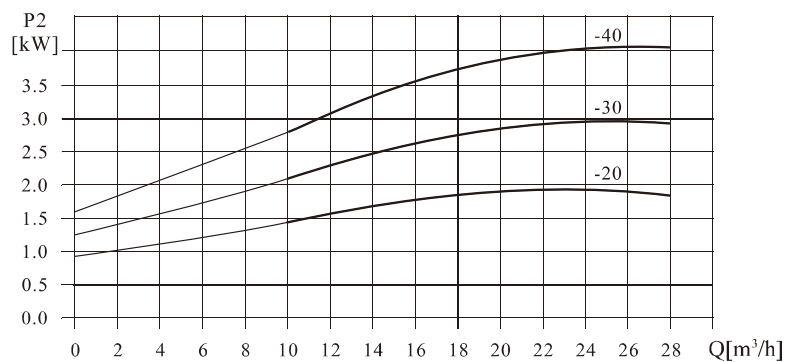
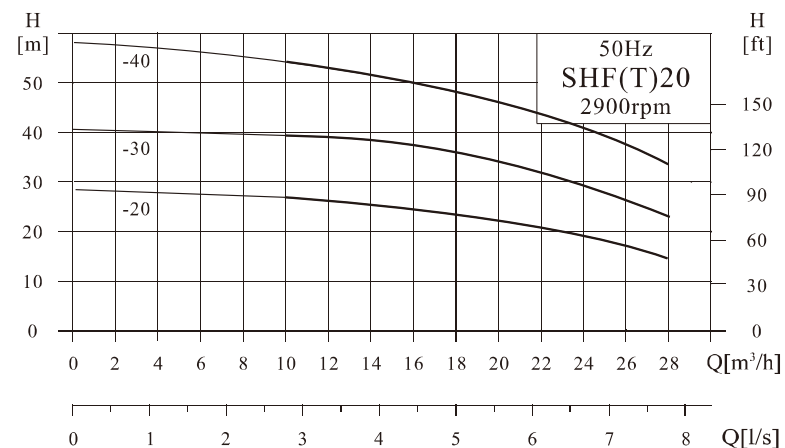
Installation



Size and Weight

Motor	Specification (mm)												Weight (kg)
	L	L1	L2	L3	L4	L5	L6	Hthree phase	Hsingle phase	H1	H2	D	
SHF(T)16-20	455	138	151	126	160	108	130	240	270	118	228	180	27
SHF(T)16-30	561	138	196	171	160	108	130	270		130	240	195	33
SHF(T)16-40	621	140	340	216	170	190	230	270		120	230	220	40

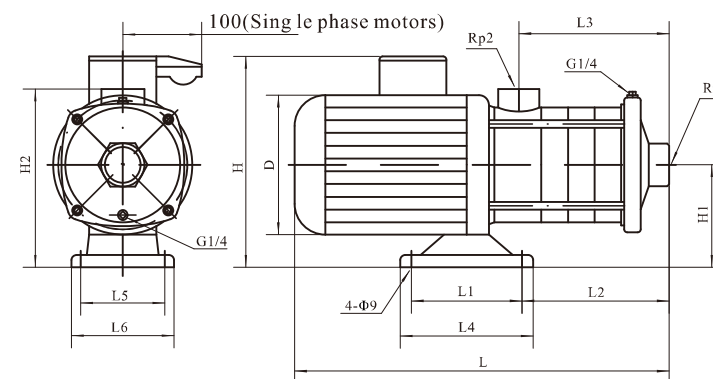
Performance Curve



Performance Curves

Model	Motor Capacity		Q (m ³ /h)	10	14	16	18	20	22	24	28
	(kW)	(hp)									
SHF(T)20-20	2.2	3	H (m)	27	25.5	25	23.5	22	20.5	18.5	14.5
SHF(T)20-30	4	5.5		39.5	38	37.5	35.5	34	31	29	23
SHF(T)20-40	4.4	6		53	51	50	48.5	46.5	43	40	32.5

Installation



Size and Weight

Motor	Specification (mm)												Weight (kg)
	L	L1	L2	L3	L4	L5	L6	Hthree phase	Hsingle phase	H1	H2	D	
SHF(T)20-20	455	138	151	126	160	108	130	240	270	118	228	180	27
SHF(T)20-30	576	140	294	171	170	190	230	270		120	230	220	40
SHF(T)20-40	621	140	340	216	170	190	230	270		120	230	220	44